It costs so little at WARD'S tomodernize your home INSIDE and OUT!







Ward's Complete Catalog of

PLUMBING • HEATING
BUILDING MATERIALS

MONTGOMERY WARD & CO.



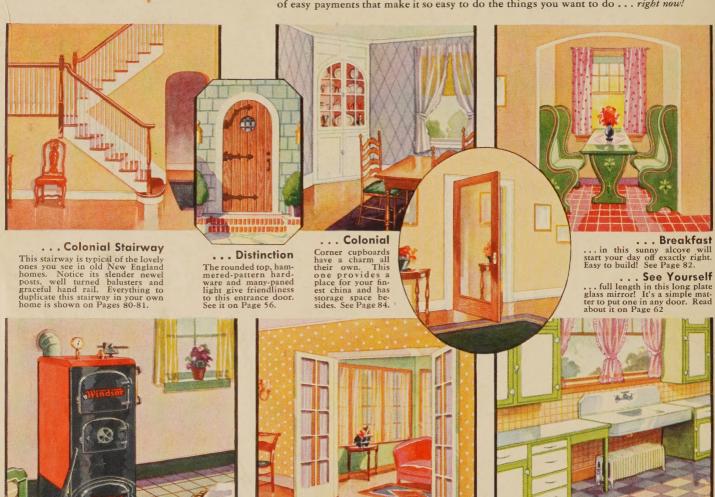
NEW WAYS TO BRING COMFORT AND

CHARM TO YOUR HOME

see how little all of them cost

GO THROUGH this interesting book right now! See the wonderful improvements it suggests for your home... a new entrance door... an inviting stairway... French windows... every room sparkling with the gayety and charm of color... even the heating plant wearing a festive red jacket. Get out your pencils—start planning now—see what big things you can do for a little money.

As you turn the pages be sure to see our free planning service and the liberal terms of easy payments that make it so easy to do the things you want to do . . . right now!



... Modern Heating

Behind its smart red enamel jacket this boiler gives you the latest improvements in hot water or steam boiler design. See it on Pages 34 and 35.

. . Plenty of Hot Water

...at any hour of the day or night, with this modern automatic gas water heater. See how inexpensively you can install this convenience in your home— Pages 44, 45 and 46. The Charm of French Doors

Use them between adjoining rooms or to open onto porch or terrace. An inexpensive way to add interest and beauty to any room. See them on Page 64.

1100004111111111

... The Modern Kitchen ... includes plenty of built-in cupboards and a shiny porcelain sink. See Pages 83, 16 and 17. The radiator goes under the sink to save space. Page 37.

Here's the very newest thing in radiators. They may be set into the wall or cleverly concealed under a window. Read about them on Page 36.

M766 - 1933

COLUMBIA UNIVERSITY

Copyright, 1933, by Montgomery Ward & Co., Inc.

Let us figure your home improvements

Whether Building or Remodeling Use Our Complete Estimating Service Without Cost or Obligation

WARDS can save you money on all your home improvements. With the help and advice of our engineers and estimators you can build, repair or remodel your home at the least possible expense. Write to us about your particular problem. Let our staff of experts tell you how to save money.

First, without obligation we will give you a complete estimate on the delivered cost of all lumber, millwork, building materials, plumbing and heating equipment for any job. You will find that Wards' low price on quality materials will save you money. Second, if you purchase a heating plant or bathroom outfit, we will furnish blue prints or working plans and easy-to-follow instructions that will show you how to make the installation yourself. Ordinarily you couldn't install this type of equipment without experienced help, but you can with the complete instructions we furnish. Hundreds of men are doing it every year and saving a large part of the labor cost in making home improvements.

Competent Engineers Study Every Problem

Your problem receives individual attention. The advice submitted by the men in our Engineering and Information Department is sound and practical. Both engineers and estimators have had a wide variety of experience. The problems they are called on to solve range from the planning of plumbing facilities for a group of tourists' cabins to instructions for the installation of a heating plant in an apartment building.

Let's have your problem—whatever it is. Much time can be saved if you send us a complete list of all the materials you need when writing us about lumber or building materials. When writing about plumbing or heating improvements send along a simple sketch of the floor plan of your home and the information requested on pages 27 and 28. You assume no obligation when you write. This estimating service is absolutely Free. Address your letter to Engineering and Information Department, Montgomery Ward & Co., at our mail order house nearest you.

Commodity Prices Are Up 50% to 150% Yet Wards' Prices Are Low

As we go to press, commodity prices are up 50% to 150% above their recent lows! And that makes the advantages of buying by mail greater now than any time since 1919!

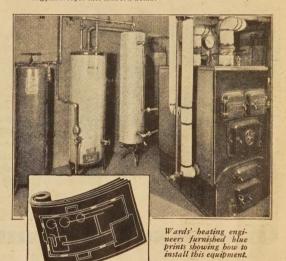
Early this year, when commodity prices were still low, we placed orders for our stocks of merchandise. You will see that we have passed the savings on to you—that our prices are much lower than they could be if we had to place our orders now.

Regardless of how high markets soar in the next few months, we will be able to maintain the low prices in this catalog as long as our stocks last. If a rising market should cause an unexpected rush of buying, our stocks may be quickly sold out. The time to buy is NOW while these savings are assured—when present stocks are exhausted, we must necessarily base our prices on replacement cost.

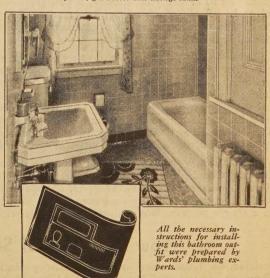
IF, during the life of this catalog, direct or indirect means of raising prices are adopted by the Government, we may be affected. Furthermore, certain states have already passed laws imposing sales and special excise taxes. Other states and the Federal Government may also do so. These situations of course will have to be met by price adjustments.



An actual photograph of a home in Glen Ellyn, Ill. Wards supplied the building materials, heating plant and plumbing fixtures for this modern home.



A photograph of Wards' Windsor bot water beating plant, water softener, gas beater and storage tank.



This photograph of the bathroom in a home in Elgin, Ill. shows one of Wards' modern bathroom outfits and a Ward tile floor.

me...let's make the home more livab



Modern fixtures are so much more attractive, convenient, easy to clean, sanitary,—appreciated by the entire family—and they're so impressive when there are guests. Ward's makes it possible for you to modernize easily and at surprisingly low cost.

YOU DON'T have to do without some of the modern conveniences that make a home more livable—and housework easier. Afraid of the cost? You'll be astonished as you look through this book to find how easy it is to acquire such necessary conveniences as hot and cold running water; a handy, roomy sink; a bathroom with tub, shower, toilet and lavatory; or a modern heating outfit.

Or if you've longed for hardwood floors—so much easier to take care of, so much better looking—and a sunny bay window; or if you've wanted to glaze in your porch, add good looking bookcases to the living room; handy cabinets in the kitchen; or seats and a table for a breakfast nook, you can buy just what you want at Ward's for very much less than you thought they would cost you.

Just a little money goes a long ways at Ward's when Improving the home

There is probably no other agent contributing in such a large way to home improvement as Montgomery Ward & Co. through its great catalog. Here is everything you need-materials for adding that sun porch-complete plumbing and heating systems-even plans showing how to install them. But, most important there is the greatly reduced cost.

In purchasing by mail you take advantage of substantial economies made possible through selling by mail. For example, you are buying a new furnace. You select easily from a carefully prepared catalog and post a letter. Promptly the furnace is delivered. Simple, isn't it? No extra expense involved at all. The facilities of our large manufacturing divisions plus this simple sales policy greatly reduce the cost of selling, and naturally the price you pay is less. And you may buy on Easy Payments if you wish—see Ward's Budget Plan on Page Four.

Of course you want to know about

As a matter of fact, there is really no need to be concerned about quality if you buy from Ward's. What more positive assurance could be offered than Ward's guarantee to return your money, if you are not satisfied. And we protect ourselves in offering such a liberal guarantee by imposing rigid requirements on the quality of material and workmanship in all plumbing fixtures, heating equipment, hardware and millwork.

On all Ward's plumbing ware you will find a seal which is your assurance that it is First Quality in accordance with grading rules established by the Sanitary Enameled Ware Manufacturers and the U. S. Bureau of Standards. All Ward's lumber and millwork is bought on rigid specifications. Lumber must meet standard grading rules established by Lumber Manufacturers Associations. Millwork must be manufactured according to established practice for first quality construction-to guard against warping, twisting and poor fit. Heating plants must develop, under test, the required heat units before Ward's will guarantee their capacities.

In addition Ward's maintains a Bureau of Standards, a great testing laboratory, one of the best equipped of its kind in any mercantile establishment in the world. Here engineers, chemists, analysts, shoppers and investigators are kept busy at the big task of trying and comparing thousands of articles of merchandise in a single season. We cannot compromise with quality.

Your Assurance of Satisfaction

Satisfaction Guaranteed or Your Money Back-including all transportation charges you have paid. We further guarantee that if, during the life of this catalog, we reduce any of our prices, we will fill your order at the lower price and refund the difference to you.



A new window here, a fireplace there, a new floor, and presto!—the living room is transformed. A more cheerful, usable, livable place. And it costs so little when you secure your materials from Ward's.

Copyright 1933, by Montgomery Ward & Co., Inc.

WAREHOUSES all over the nation

to serve you Quickly...make savings even greater

No matter where you live Ward's will handle your order speedily and satisfactorily, whether it's a big heavy furnace or a few storm sash. Large stocks are carried in warehouses strategically located over the nation, always at important railway shipping centers. We can ship from a number of factories, always handling your order from points nearest you.

It is such a simple matter to purchase all your materials and equipment from Ward's. You order easily from a handy catalog, put everything you will need on one order, mail it and forget it. Promptly at Ward's, it is checked by expert shipping men who personally direct the handling of every item and figure the most economical way to ship, saving you as much as possible in time and money.



FROM THIS ORDER

Use our regular order blank or any plain piece of paper. Be sure to give the numbers as listed in the catalog, also sizes and amounts required. In giving dimensions always give widths before lengths.

How to Send Money: Send remittance in the form of postoffice or express money order, bank draft, or personal check. If you send money, be sure to send it by registered mail, securely folded in heavy paper. If you live on a rural route, you can pay the money to your mail carrier. He will buy the money order and enclose it with your letter. Regular terms are cash with order, unless you take advantage of our Budget Plan . . . See Page 4.

Sizes and Grades given in this book have been adopted by the Manufacturers' Associations as the official standards.

C.O.D. Shipments: On orders of \$50.00 or more we will accept a remittance of one-fourth cash, balance C.O.D. We do not recommend this, as it means a little delay and a

little extra expense to you. Be sure to arrange to take care of balance when shipment arrives, and tell us the name of bank through which you desire collection to be made.

Bank Guarantee: We will also ship orders of \$50.00 or more on receipt of a letter from our bank stating that the money will be paid within five days of receipt of shipment.

Building and Loan Associations usually require a certain amount of construction work to be done before paying over any money to the builder. Write us for information and tell us just how you are situated.

Freight charges amount to little. Each item is packed so as to take the lowest classification. The weight of each item is given in the description, and at left you will find a schedule of freight rates showing the Estimated Freight Charges per 100 lbs.

Write us for shipping instructions before returning merchandise.

			-			
Freight Charges per 100 Lbs.	75	150	300	500	750	1000
For Distances of	Miles	Miles			Miles	Miles
Air Registers	38c	48c	70c	\$1.01	\$1.36	\$1.56
Bath Tubs	54c	68c	99c	1.44	1.94	2.22
Bathroom Outfits	54c	68c	99c	1.44	1.94	2.22
Boilers, Cast Iron Heating	28c	35c	52c	.80	1.08	1.23
Boiler Parts	38c	48c	70c	1.01	1.36	1.56
Building Papers	31c	38c	55c	.80	1.08	1.23
Cement, Asbestos	31c	38c	55c	.66	.88	1.02
Closets, Chemical	46c	58c	84c	1.44	1.94	2.22
Closets, Sanitary	38c	48c	70c	1.01	1.36	1.56
Disinfectant	38c	48c	70c	1.01	1.36	1.56
Doors, Wood Panel	38c	48c	70c	.80	1.08	1.23
Doors, Combination	38c	48c	70c	.80	1.08	1.23
Doors, Glazed	54c	68c	99c	\$1.44	1.54	1.66
Flooring, Hardwood		35c	52c	.59	.79	.90
Frames, Door and Window, K. D	38c	48c	70c	.80	1.08	1.23
Furnaces	28c	35c	52c	1.01	1.36	1.56
Furnace Fittings	38c	48c	70c	1.01	1.36	1.56
Garage Door Hardware	31c	38c	55c	1.01	1.36	1.56
Gas Burners	46c	58c	84c	1.44	1.94	2.22
Glass	46c	58c	84c	1.23	1.65	1.89
Hardware	38c	48c	70c	\$1.23	1.65	1.89
Interior Trim, K. D	38c	48c	70c	1.01	1.36	1.54
Ironing Boards	46c	58c	84c	1.23	1.65	1.89
Lavatories	38c	48c	70c	1.23	1.65	1.89
Laundry Tubs, Composition	38c	48c	70c	1.01	1.36	1.56
Lumber	28c	35c	52c	.59	.79	.90
Mill Work, K.D	38c	48c	70c	1.01	1.36	1,56
Oil Burners	46c	58c	84c	1.23	1.65	1.89
Oil Storage Tanks and Drums	80c	\$1.01	\$1.48	2.15	2.90	3.30
Pipe and Fittings, Iron, Steel & Soil	28c	35c	52c	.59	.79	.90
Pipe and Fittings, Brass	46c	58c	84c	1.23	1.65	1.89

ripe and rittings, from, steer & son	200	336	320	.37	.17	.90
Pipe and Fittings, Brass	46c	58c	84c	1.23	1.65	1.89
Pumping Plants	46c	58c	84c	1.44	1.94	2.22
Pumps, Hand	38c	48c	70c	1.01	1.36	1.54
Pumps, Power	45c	58c	84c	1.23	1.65	1.89
Pump Parts	38c	48c	70c	1.01	1,36	1.56
Radiators, Cast Iron Heating	28c	35c	52c	.80	1.08	1.23
Rams, Hydraulic	54c	68c	99c	1.44	1.94	2.20
Range Boilers, With Heaters	38c	48c	70c	1.23	1.65	1.89
Range Boilers, Without Heaters	38c	48c	70c	1.01	1.36	1.56
Roofing, Asphalt Roll	31c	38c	55c	.80	1.08	1.23
Sash, Glazed	54c	68c	99c	1.06	1.36	1.56
Sash, Not Glazed	38c	48c	70c	.80	1.08	1.23
Sash, Storm	54c	68c	99c	1.06	1.36	1.56
Sash Weights	28c	35c	52c	.80	1.08	1.23
Screens, Door and Window	46c	58c	84c	1.23	1.65	1.89
Septic Tanks	54c	68c	99c	1.44	1.94	2.22
Shingles, Asphalt	31c	38c	55c	.80	1.08	1.23
Shutters and Blinds	54c	68c	99c	1.06	1.36	1.56
Sinks	38c	48c	70c	1.23	1.65	1.89
Tanks, Galvanized	54c	68c	99c	1.44	1.94	2.22
Tile, Kroma	46c	58c	84c	1.23	1.65	1.89
Tile, Clay	31c	38c	55c	.80	1.08	1.23
Tubing, Copper	38c	48c	70c	1.23	1.65	1.89
Wallboard and Cel-Board	38c	48c	70c	.76	.88	1.01
Water Closet Bowls	38c	48c	70c	1.01	1.36	1.56
Water Closet Tanks	46c	58c	84c	1.23	1.65	1.89
Water Heaters, Automatic	46c	58c	84c	1.23	1.65	1.89
Water Heaters, Electric	54c	68c	99c	1.44	1.94	2.22
Water Heaters, Gas, Gasoline, Oil.	46c	58c	84c	1.23	1.65	1.89
Water Softeners	46c	58c	84c	1.23	1.65	1.89
Water Tank Heaters.	38c	48c	70c	1.01	1.36	1.56
Well Drilling Hand Auger	38c	48c	70c	1.23	1.65	1.89
Windows, Glazed	38c	48c	70c	1.23	1.65	1.89

HOW TO FIGURE FREIGHT CHARGES

All railroads make the same charge on shipments of less than 100 lbs. as they do for a full 100-lb. shipment. It is more economical to build your order up to 100 lbs. or more. When the weight of your order is more than 100 pounds, you pay charges based on actual weight only. In no instance will a freight charge be less than 50 cents.

You can quickly figure the cost of transportation on your order from the tables of freight and express charges on this page. Your savings are greater when you order by

savings are greater when you order by freight.

EXAMPLE: If you live about 150 miles from the shipping point and order a Pumping Plant weighing 250 pounds; by referring to the table below, you will find the charge per 100 pounds on a Pumping Plant is 58c. Multiply 2.50 by 58c and you get \$1.45, the approximate charge.

We pack all goods to assure the lowest possible freight charge and the safe delivery of your order. All these estimated Freight and express charges were based on actual rates in effect at time this catalog was printed and are subject to change without notice.

HOW TO FIGURE EXPRESS CHARGES

For quick delivery of an unmailable order and you want it shipped by express, the table below will help you to estimate the charges. EXAMPLE: Suppose your order weighs 20 lbs. and you live 290 miles from shipping point. Find total weight, 20 lbs., in first column. On the same line under 300 miles distance, is the amount, 77c—the approximate express charge.

For Distances of	50 Miles	150 Miles	300 Miles	500 Miles	750 Miles	1000Miles
'Package Not Over						
5 pounds	39c	41c	45c	48c	52c	55c
10 pounds	43c	48c	56c	62c	69c	75c
15 pounds	47c	54c	66c	75c	86c	96c
20 pounds	51c	61c	77c	89c	\$1.03	\$1.16
25 pounds	55c	67c	87c	\$1.02	1.20	1.36
35 pounds	63c	80c	\$1.08	1.29	1.54	1.77
45 pounds	71c	93c	1.29	1.56	1.88	2.17
55 pounds	79c	\$1.06	1.50	1.83	2.22	2.58
75 pounds	95c	1.32	1.92	2.37	2.90	3.39
95 pounds	\$1.11	1.58	2.34	2.91	3.58	4.20
100 lbs. and over,	200				- 110	N COLUMN
rate per 100 lbs. is	1.15	1.65	2.45	3.05	3.75	4.40

It's EASY to Figure the Amount of Postage

If you live in Zone 3 and order merchandise weighing 10 pounds, the parcel post charge is 9 cents for the first pound and 2 cents for each additional pound (18 cents), making a total of 27 cents.

For packages of 8 ounces or less to any zone, allow:	Zone	Zone	Zone	Zone
1½c for 2 oz. or less. 3c for 3 or 4 oz. 4½c for 5 or 6 oz. 6c for 7 or 8 oz.	1 or 2	3	4	5
For weights over 8 oz. up to	96	9c	10c	11c
For each additional pound or fraction of a lb. add	11/10C	2c	31/2c	53/10C

Postage Weight and Size Limits: Packages of 70 pounds or less and not exceeding 100 inches, length and girth combined, may be mailed to any address in the United States.

IMPORTANT!...

... We do not prepay postage on any merchandise in the merchandise in the merchandise in the control of postage with your order. If you send more postage than is necessary, the difference will be refunded to you. If exact amount of postage is not shown in description, it may be quickly and easily figured by referring to the chart at left.

Enjoy them NOW-pay for them LATER

Budget plan EASY PAYMENTS

SOMETIME, you say, you're going to fix things up—perhaps put down hardwood floors, add a sun porch, install running water or change that staircase around—when you can afford it. Instead of saving and waiting, why not have the things you need now by sending a small down payment—and pay the balance later, a little at a time?

Your improvements can probably be put in for much less than you think. There never was a better time. And Wards' offer you a Budget Plan of convenient Easy Payments.

Prices in this book are cash prices which reflect all the economies of buying by mail. If you wish to take advantage of our Easy Payment Plan you pay just these low prices, plus a small charge to cover the expense of our Budget Plan Department. (This expense is borne, fairly enough, by the customers who use this special service.)

Combine all the things you need in one order, the only requirement being that your order total at least \$20. Add, if you wish, any merchandise offered on the Budget Plan from Wards' General Catalog. Make out your order on any of our Easy Payment order blanks. If without one, use any plain sheet of paper. Remember, even after the Budget Plan charge is added, Wards' prices are usually lower than cash prices in most stores.

PAYMENTS AS LOW AS \$3 DOWN

If Cash Price of	Add for Budget	First Payment	Monthly
Your Order Amounts to	Plan Price	With Order	Payments
\$20.00 to \$25.00	\$2.50	\$3.00	\$4.00
25.01 to 30.00	3.00	3.00	5.00
30.01 to 35.00	3.50	4.00	5.00
35.01 to 40.00	4.00	4.00	5.00
40.01 to 45.00	4.50	5.00	5.50
45.01 to 50.00	5.00	5.00	5.50
50.01 to 60.00	5.50	5.00	6.00
60.01 to 70.00	6.50	6.00	7.00
70.01 to 80.00	7.50	7.00	7.50
80.01 to 90.00	8.50	8.00	8.00
90.01 to 100.00	9.50	9.00	8.50
100.01 to 110.00	10.50	10.00	9.50
110.01 to 120.00	11.50	10.00	9.50
120.01 to 130.00	12.50	10.00	10.50
130.01 to 140.00	13.50	10.00	10.50
140.01 to 150.00	14.50	10.00	11.00
150.01 to 175.00	16.00	15.00	12.00
175.01 to 200.00	17.50	20.00	13.50
200.01 to 225.00	20.00	22.50	14.00
225.01 to 250.00	22.50	25.00	15.50
250.01 to 275.00	25.00	27.50	16.00
275.01 to 300.00	27.00	30.00	17.50
300.01 to 350.00	31.00	35.00	19.50
350.01 to 400.00	36.00	40.00	22.00
400.01 to 450.00	40.00	45.00	25.00
450.01 to 500.00	44.00	50.00	27.50
			mark to

On orders totaling more than \$500 we offer special terms. Write us giving total amount of order.



As we go to press, commodity prices are rising. But Wards' prices are still Low! That's why we urge you to modernize your home Now! Make it the comfortable, convenient place it should be at a cost lower than you may ever see again! Now is the time to buy!

Investigate the low cost of installing these conveniences. You'll find water pumps on Pages 50 to 54—bathtubs on Page 12—sinks on Pages 16 and 17.

Letters like these are received daily

"Our Little Giant Water System supplies all our needs. We have one bath, two lavatories, two toilets and one sink. The pump draws water from a 22 foot well. The system was easy to install. We all would not do without it for many times its cost."

> W. S. Barrett Brownsville, Ky.

"I received the bathroom outfit before I was ready to install it. Was more than pleased with it and so was the family. Also bought your automatic hot water heater and think it fine as it gives us real hot water at any time wanted. Bought all the electrical fixtures for my new house doing the work myself on both wiring and plumbing. Your instructions were ample. You can rest assured I saved a lot."

> C. M. Setser Portales, New Mexico

"We are more than pleased with our Windsor furnace. In the coldest weather we can bring the house to any tem-perature we want. We have a six-room house and average about one ton a month in cold weather. I installed the furnace myself."

J. P. Belton Warren, Pa.

"My business is building houses for renting. I have written to several furnace manufacturers for prices but so far no one has offered me anything better than the Windsor. I have bought three Windsor furnaces in a week. The new houses were leased before they were finished and the people asked 'Are you going to install the same kind of furnace as in the other houses?"

"A Windsor means even heat and a warm house in the morning. It gets as cold around here as it does around Chicago."

J. R. Wolert Truckee, California

THINGS Onioblu

WHERE	TO FIND THIN	igs Luuc	VEU
DOMESTIC WATERHeatersRange BoilersTanksWater Softeners.44-4 HEATINGBoilersFurnaces Gas-Oil BurnersPipe and Fit- tingsRadiatorsWater Heaters.20-4 INSULATIONCel-Board FeltPaperSheathing Wallboard90-9	LUMBER Ceiling Closet Flooring Panels Siding . MILLWORK Built-In Convenie Colonnades Doors Glass Material Sash Screens S Trim and Moulding Windows PLUMBING Bathroom Outfits and Seats Lavatories P	nces Porch tairways Closets ipe and SinksTub ROOFING Ridge as ShinglesS RUNNING W Water Systems Well Pumps	PAGES owers and Curtains
Easy Payments and Budget Plan Engineering and Estimating Service How to Figure Transportation Charges How to Measure and Order Pipe 4 How to Plan Your Home Improvements	How Much Does a Plumbing Syster What Kind of Water System Should	tems How to Instal48,49,53 Systems n Cost? 6 What Type of I Buy?.48, 49 What You I	ll and Operate Heating24-25 Heating Should I Buy? 20-23 Need for Deep Well54
COMP you need for	LETE INDE r modernizin	X of ever	ything mne
Asbestos Paper . 37, 92 Ash Dumps . 88 Asphalt Roofing . 94, 96 Asphalt Sliding . 96 Asphalt Sliding . 96 Astragals . 72 Augers, Closet and Sewer . 15 Ball Barn Sash . 72 Baseboards . 78 Bathroom Fixtures . 19 Bathroom Outfits . 79, 11 Bathroom Fixtures . 19 Bathroom Outfits . 79, 11 Bathrus . 12 Battens, Barn . 79 Bending Tools . 41 Bevel Siding . 89 Bibb Reseaters . 18 Blind Stops . 78 Boilers, Heating . 33-35 Boilers, Range . 45, 46 Boiler Liquid . 40 Bolts, Stair Rail . 81 Bookcases, Built-In . 84 Breakfast Nooks, Built-In . 84 Breakfast Nooks, Built-In . 84 Buffets, Built-In . 84 Built-In Conveniences . 82-84 Calking Deor and Window . 78 Ceiling, Beaded . 88 Ceiling Cornice . 78 Ceiling Plates . 40 Cel-Board . 91 Cellar Sash . 72 Cement, Waterproof . 86 Centrifugal Pumps . 51, 53 Cistern Covers . 52 Chair Rail . 86 Chemical for Closets . 15 Closet Bowls and Seats . 14 Closets, Chemical . 15 Closet Tanks . 14 Closet Supplies . 15 Closet Tanks . 14 Cold Air Pipe and Fittings . 39 Collars, Furnace . 38, 39 Colper Radiation . 36 Copper Rad	Alit-In. 83, 84 Prices. Preight Rates Prices. Preight Rates Prices. Preight Poors Prench Doors Frames Prench Door Frames Prench Window Frames Prench Window Frames. Prench Door Frames Prench Window Frames. Prench Window Frames. Prench Door Frames Prench Window Frames. Prench Door Frames. Prench Window Frames. Prench Windows. Prench Windows.	Panels Fir Veneer	Sink Backs 17 Sink Legs 16 Sink Strainers 16 Sink Strainers 17,18 Smoke Pipe and Fittings 39 Soap Dishes, Bathroom 19 Solder, Wiping 43 Soldering Irons, Electric 55 Spout Attachments, Pump 52 Stair Material 80, 81 Stairways 80, 81 Stairting Steps and Risers 80 Steam Boilers 32235 Steam Fittings 42 Stool, Window 78 Stools, Bathroom 19 Stopcocks 41 Storm Doors 66, 69, 56 Storm Windows 66 Storm Windows 66 Storm Windows 66 Storm Sash 66, 67 Strips, Building 92 Strip Shingles 96 Supply Pipes 18 TANKS 40, 44-47, 54, 55 Tank Heaters 44-47 Tape, Joint 90 Tees, Pipe 41-43 Thermometers, Hot Water 40 Threshold, Hardwood 79 Tile 87 Tools, Plumbing 41, 55 Transom Lights 72 Trim, Door 75 Trim, Exterior 79 Trim, Interior 79 Trim, Interior 78 Trim, Exterior 79 Trim, Interior 78 Trim, Mission 75 Trim, Exterior 79 Trim, Interior 78 Trim, Window 75 VALLEY Strips 92 Valves, Heating 40, 46 Valves, Plumbing 41, 51 Trim, Window 75 VALLEY Strips 92 Valves, Heating 40, 46 Valves, Plumbing 75 WALLP Strips 92 Valves, Heating 40, 46 Valves, Plumbing 87 Vapor Accessories 40 Vapor Boilers 34 Vigoray Glass 72 Virgin Lead 43 Vises, Pipe 55 WALL Paper Catalog Coupon93 Wall Tile 87 Wall Board 90 Wash Bowls 10, 11 Washers, Lip Union 43 Water Heaters 44-47 Water Systems 50, 51, 53, 54 Well Borers 93 Well Cylinders 52 Windows, 56 Windows, Steel Basement 88 Wrenches 55

YOU CAN HAVE A MODERN BATHROOM IN YOUR HOME no matter where you live

We will show you how ... the cost is small ... easy monthly payments

YOU'VE ALWAYS wanted a bathroom. Who doesn't? A shiny, roomy tub to jump into...comfort and convenience the year 'round. There's no reason why your home can't be made just as livable as the homes of your friends in town. Maybe you have the notion it would cost a lot of money...more than you could afford to spend. Don't be too sure about that...at least not until you know how much Ward's can save you.

Of course you have a well, and in most any home it's easy to find space for a bathroom in an unused closet, the end of a hallway, etc. It's a very simple matter to bring the water into the house, arrange for sewage disposal and set up the bathroom fixtures. There's nothing any handy man can't do, especially with the help of our Engineering Department instructions.

Just to see how simple the whole business really is . . . on Page 48 there is an excellent picture of the entire layout. The pumping outfit shown is electrically operated but you can use either Electric or gas engine power.

And here is the big surprise! A complete installation from start to finish including an electric pump, would cost less than \$190! A lot less than you thought, isn't it? Of course all the equipment is figured at Ward's catalog prices which are always lower than other prices due to the economies possible in selling by mail. And here's another surprise! Taking advantage of our Budget Plan of Easy Payments you could put all this material on your place for a down payment of \$20 and pay the balance at the rate of only \$13.50 a month—while you are enjoying these modern conveniences.

The Things You Need and About What They Cost

Bathroom Outfit	.\$ 44.50
Pipe and Fittings	. 50.00
Septic Tank	
Pipe for septic tank	
Automatic Electric Pump	
Laundry Tubs	
Kitchen Sink	. 17.00
	\$186.65

Obviously we could not include the cost of labor. Many of our customers do the work themselves, sometimes with the help of a neighbor, sometimes employing the local plumber. Remember our Enineering Department furnishes complete installation instructions, quite easy for anyone to understand. In the pipe and fittings we have included everything necessary to do a good sanitary job. You realize that ordinances in various cities differ widely, affecting the cost or installation one way or another. And so that part of our estimate is only approximate.

Every day, inexperienced people are making complete installations of modern home improvements with only the help and advice of our plumbing experts. When you write to us about your requirements be sure to enclose a copy of your local plumbing code, which may be obtained from your City Clerk.

On a rough floor plan sketch, indicate:

What plumbing, if any, is now in your home.

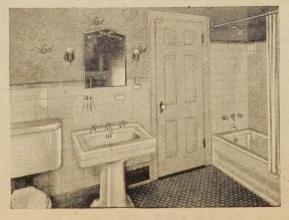
Where sewers enter the house, or the location of the septic tank, if any.

Where city water will enter (if available). If using own water source furnish a rough sketch, with measurements, showing proposed location of pump, water supply and point of discharge.

Indicate catalog number or type of fixtures and pump outfit in which you are interested.



Suggesting what you can do with your bathroom to make it modern—and new and smart looking. Notice the economical use of space in its careful planning. See how the Kroma-Tyle wall and the block pattern linoleum floor serve as a smart setting for the shining white porcelain fixtures. A gay shower curtain and small accessories complete the color scheme.





Certified First Quality

The seal you see above is on every piece of enamelware we sell. (A similar one, giving you the same kind of quality insurance, appears on all our Vitreous China fixtures.) It tells you that the fixture you have purchased is First Quality as specified by the Sanitary Enamelware Manufacturers Association in accordance with recommendations of the U. S. Bureau of Standards. You cannot buy finer quality!

Buying for the Future

We believe that nothing takes the place of quality... the quality that you can see in smooth sparkling surfaces and the quality that you do not see, but that you know instantly in the ready rush of water out of a faucet and in the speedy smoothness of a quick acting drain.

Good plumbing fixtures will last for years and years. Don't take a chance on quality. You don't have to ... even in the interest of economy ... for our prices are so moderate that you can have First Quality and still be thrifty.

• Wards Save You Money

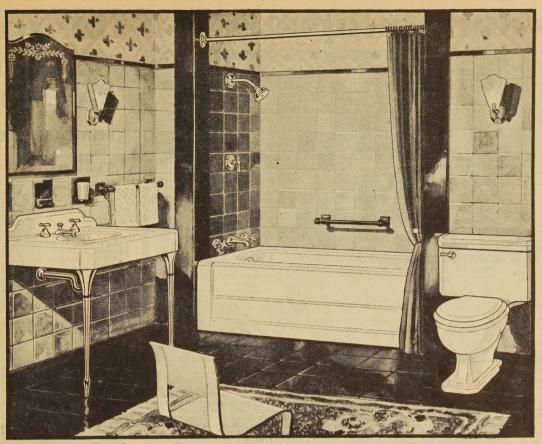
Now more than ever Wards save you money. Everybody knows how commodity prices have gone up. Right now as we go to press they're 50% to 150% higher than their 1932 lows.

Wards anticipated this upward movement. Back in March and early April we bought tremendous stocks of merchandise when prices were still low! Accordingly our merchandise is priced on that basis—NOT on today's increased costs.

Modern Bathroom Design

Ward's bathroom fixtures have style ... sleek, modern lines that will look just as nice years from now as they do to-day. If you want to modernize your present bathroom ... if you want to build a new one, let Wards help you. The cost will be surprisingly small.

Look through these pages. Pick out the bathroom you like best and imagine it as yours fresh and lovely, in pastel colored or snowy white enamel ... gleaming with shiny chromium. This bathroom can be yours. Wards has made it so easy to own. Buying by mail brings you lower prices. If you like, you may use Ward's Budget Plan and spread the payments over several months.



CASH PRICE SIOOD DOWN \$1050 MONTHLY See Page 4

THE "ULTRA"—(Shown in Colors on Back Cover)

HIS is the kind of bathroom you'd expect to see in the very finest of homes! But it's priced within your means. We've put it here to show you how little it costs to have a beautiful, modern bathroom. We've pictured it again on the back cover so you can see how lovely it is in actual color. Turn to the cover now and look at it; then turn back here and read about its modern design, its fine quality and its very modern efficiency. You can make old walls or new ones look like this with Kroma-Tyle, page 86. The smart accessories such as towel racks, cabinets and shower curtains are shown on other pages.

TUB: All shining Porcelain Enamel, with bright chromium plated fittings and convenient trip-lever waste (No. 81 H 6521, shown on page 19). Shower with mixing valve, rod, curtain snaps and hold back chain are also included. Curtain not included. Tub is 30 inches wide and 18 inches deep.

LAVATORY: Dressing table style in first quality Porcelain Enamel with slender chromium plated legs and chromium plated fittings throughout. Indexed faucet handles, mixer spout and pop-up waste. (No plug and stopper to bother with.) Top is 30 by 22 inches; roomy bowl is 11 by 16 inches

CLOSET: First Quality vitreous china. Latest model as described on page 14 with sheet celluloid covered pearl finish seat to match rest of outfit and chromium plated fittings. Compact in design, specially quiet and quick in operation. Tank is bolted direct to bowl—does not hang from wall.

Approx. ship. wt. 800 lbs. Shipped Not Prepaid only from Factory near Pittsburgh, Pa. Est. Fre ght Charges under Bathroom Outhts on Page 3. Corner tub may be substituted for recess tub for \$4.00 extra. State whether tub for rights or left corner of room. Complete ready to install. Prices below are for white. For green, orchid or ivory add \$28.00 extra. State color.

Outfit with Tub Fittings in Left End as Pictured 281 H 203 Lavatory Fittings to Wall 281 H 204 Lavatory Fittings to Floor	5 ft. Tub \$134.95 135.75	\$138.95 139.75
Outfit with Tub Fittings in Right End		
281 H 201 Lavatory Fittings to Wall 281 H 202 Lavatory Fittings to Floor	\$134.95 135.75	\$138.95

THE "PATRICIAN" \$7545

CASH PRICE

You can work many lovely effects here, because the Patrician comes in green, ivory and snowy white as well as orchid. It is one of our newest outfits, each piece first quality with Colonial paneling, modern cut-off corners and heavy chromium plated fittings.

TUB: Glistening porcelain enamel inside and out. Shown here for right corner, but may be had for left corner. Tub is 30 inches wide with chromium plated fittings built into wall; over-tim mixer spout. Plug and chain. If you prefer a recessed tub, deduct \$3.50, and state whether you want fittings in right or left end.

LAVATORY: Smart pedestal style porcelain enamel. Top is 24 by 20 inches; octagon shaped bowl is 11 by 16 inches. Chromium plated fittings include indexed faucets and pop-up waste.

CLOSET: Vitreous china with reverse trap bowl. Seat and cover

plated fittings include indexed faucets and pop-up waste.

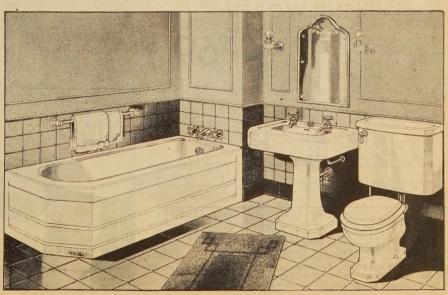
CLOSET: Vitreous china with reverse trap bowl. Seat and cover are genuine sheet celluloid-covered hardwood to match rest of outfit. Rough in (distance between wall and closet outlet) 14 in.

OUTFIT: Complete with iron pipe connections ready to install. Est. Freight Charges under Bathroom Outfits on Page 3.

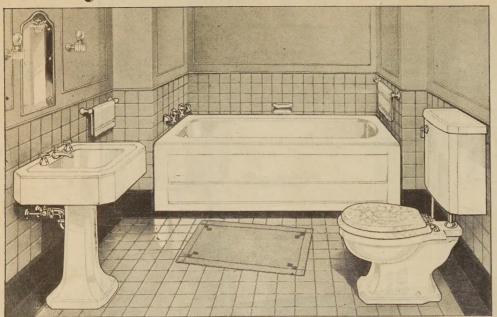
Approx. ship. wt. 900 lbs. Not Prepaid. White sets shipped from Stock. Colored sets shipped from Chicago or Factory near Pittsburgh, Pa.

Prices below are for white. For green, orchid or ivory add \$22.00 extra. State color. For lavatory fittings to floor add 75c.

Outfit with Right Corner Tub as Pictured	5 ft. Tub	1 51/2 ft. Tub
181 H 227 Lavatory Fittings to Wall	\$75.45	\$79.25
Outfit with Left Corner Tub. State corner wa	anted.	
181 H 229 Lavatory Fittings to Wall	75.45	1 79.25



Let your Bathroom tell the world



The time to plan BATHROOM is famous porcelain selling at record

Here's a pantry that lost its shelves and be-came a bath-





And this is the bathroom that started life as a

"THE EASTLAKE"

"Try to show our customers how handsome this outfit really is," we told our artist, "give them an idea how nice that lavatory looks with its modern squared off corners. Show how the beautiful tub fits right in the wall and the artistic pearl finish closet seat—be sure to do that justice—it would cost \$10 or \$12 to buy separately. Be particular about the fittings too. We want our people to notice their new art lines. Too bad you can't make them sparkle like the real chromium plated ones!"

Tub and lavatory are made of gleaming porcelain enamel. Lustrous vitreous china is used for the closet. Quiet syphon jet action flushes in about 7 seconds. "Rough-in" (distance from wall to center of drain pipe) is 12 inches. Pearl finished sheet celluloid covered closet seat in green, orchid, ivory or white to match sets. Tub has built-in concealed chromium fittings in right or left end. Lavatory has 24 by 20-inch top and single stream chromium faucet, 11 by 16 inch bowl and stops on supply pipes. Traps and supply pipe and all necessary iron pipe connections included. For Shipping Points see opposite page.

Article No. 1 Tub Fittings | Lavatory Fittings | 5-ft. Tub | 5½-ft. Tub

Tub Fittings Lavatory Fittings Article No. 5-ft. Tub 181 H 295 181 H 297 181 H 296 In Right End In Left End In Right End In Left End To Wall To Wall \$82.75 82.75 \$85.75 85.75 To Floor 83.45 181 H 298

For corner tub add \$4.00. Easy Payments, see Page 4. Approximate shipping weight 800 lbs. Not Prepaid. For Estimated Freight Charges See "Bathroom Outfits" on Page 3.

Also in Green, Orchid or Ivo-For color

add \$22 extra. State color wanted.

All pieces in these Outfits shown sep-

arately on following pages.

Look what's happened here! A pantry made into a bathroom! In the home of Mr. A. F. Otis, in Northern Illinois, there was need of a bathroom down-

In Mr. Otis' home there was an unused pantry just large enough to accommodate tub, lavatory and closet. All materials and fixtures were secured from Ward's catalog. The photographs above show how well the plan worked out. You can do the same thing, a room only 5 feet wide will accommodate a bathtub.

Also in Green,

Orchid or Ivory. For color add \$23 extra. State color.

\$8275

All pieces in these Outfits shown sepgrately on following pages.

"KENILWORTH"

"Almost as handsome as your Eastlake outfit" is what people say of the Kenilworth. And we agree with them. In fact the tub is exactly the same as the one in our higher priced suite except that it has over-rim fittings instead of the concealed type. The lavatory bowl is built on modern art lines with cut off corners and a useful "splasher" back to keep your walls tidy. Tub and lavatory of Ward's famous first quality enamelware.

All Fittings Are Chromium Plated

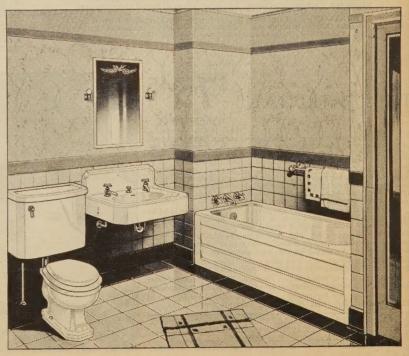
Closet is of vitreous china built with efficiently operating reverse trap bowl, rough in to wall 14 inches. Closet seat is of smooth hardwood covered with sheet celluloid in white or colors to match outfit. Tub is made in 5-foot and 5½-foot lengths 30 inches wide with right or left end fittings.

Lavatory top is 17 by 21 inches. Bowl is 10 by 15 inches. Chromium plated fittings furnished throughout this outfit.

Article	Tub	Lavatory	5-ft.	5½-ft.
No.	Fittings	Fittings	Tub	Tub
181 H 271	In Right End	To Wall	\$69.45	\$73.45
181 H 273	In Left End	To Wall	69.45	73.45
181 H 272	In Right End	To Floor	69.95	73.95
181 H 274	In Left End	To Floor	69.95	73.95

For corner tub, add \$4.00. Easy Payments Page 4. Approx. ship. wt. 700 lbs. See Shipping points on opposite page.

For Estimated Freight Charges See "Bathroom Outfits" on Page 3.



this is a MODERN HOME

that PERFECT now with Ward's enamelware low prices . . .



We have assembled five handsome sets on these pages. Every one well-made of First Quality Porcelain Enamel. Every one is efficient in operation and as low in price as we can possibly make it.

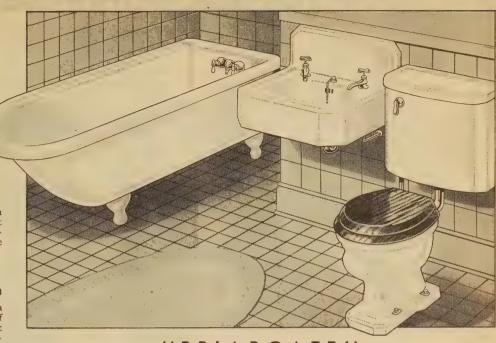
Don't Delay ... Use Ward's Budget Plan

If you are intending to buy your outfit "a little later"... there is no need to delay. If you want a bathroom now, you can have it now, Every day you put it off means inconvenience if not actual discomfort. Don't let the question of ready money stand in your way. Ward's Budget Plan will enable you to own your bathroom outfit at once for a very small cash payment—as little as \$5.00 which is the down payment on the Briargate. On Page 4 you can see how very little the monthly payments amount to. With buying made so easy there's no reason why you shouldn't enjoy your bathroom set right now.

Shipping Points

for Bathroom Outfits

White sets shipped from Stock. Colored sets shipped Not Prepaid from Chicago or factory near Pittsburgh, Pa.



"BRIARGATE"

A modern bathroom outfit for \$43.45! And what a perfect time it is to install running water if you haven't it already! Wards prices are very low. Here's an example: This Briargate Outfit, a septic tank for sewage disposal plus our Little Giant shallow well pump can be bought to-day for about \$160.00. Only a small down Payment is necessary, see Ward's Budget Plan on Page 4. That price includes fittings and pipes—everything necessary to put your closet, tub and lavatory into immediate operation. The bathroom set shown here includes: Faucets, trap, supply pipes, all connections and closet seat. The lavatory is built on the same modern lines as sets costing nearly twice as much. It's made of exactly the same First Quality Porcelain as they are. Closet is made of stainless vitreous china. The bathtub is enameled inside. Outside, it's neatly painted white. Faucets are in the new modern style, brilliantly chromium plated. Bathtub is a full 30 inches wide in three different lengths. Lavatory top is 17 by 19 inches; bowl 10 by 15 inches. Closet is the washdown type. The rough-in (distance from wall to center of drain pipe) is 14 inches. Seat is hardwood in a rich mahogany finish. Shipped Not Prepaid from Stock.

Approximate ship, wt., 550 lbs.

For Estimated Freight Charges see "Bathroom Outfits" on Page 3.

Article No. Lavatory Fittings 44/2-ft. Tub 5-ft. Tub 54-ft. Tub

Article No.	Lavatory Fittings	4½-ft. Tub	5-ft. Tub	5½-ft. Tub
181 H 941 181 H 942	To Wall To Floor	\$43.45 43.95	\$44.25 44.75	\$46.25 46.75
101 11 712	10 1 1001	73.93	77.73	40.73

\$4345

Complete with all faucets, trap, supply pipes, all connections and closet seat.



"DEERFIELD"

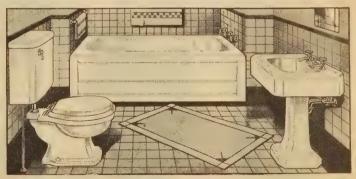
\$56⁴⁵

Complete with all faucets, trap, supply pipes, all connections and closet seat.

No dust can get underneath this tub. It is 30 in, wide, made of cast iron heavily coated inside and over rim with First Quality porcelain enamel... painted white outside. Has ideal type lift waste and supply pipes. Modern porcelain enameled lavatory has protecting "splasher" back. Top is 17 by 21 in., bowl 10 by 15 in. Chromium-plated Art Line faucets. Closet is finest vitreous china with washdown jet flushing action. Seat is mahogany finished. Rough-in (distance from wall to center of drain pipe) is 14 in. \$56.45 includes all faucets, traps, supply pipes, connections and closet seat.

Not Prepaid. Approximate shipping weight, 600 pounds. For Est. Frt. Charges see "Bathroom Outfits" on Page 3.

Article I	With Lava-	4½-ft. Tub	5-ft.	51/2-ft.
No.	tory Fittings	Tub	Tub	Tub
181 H 983	To Wall	\$56.45	\$57.95	\$60.25
181 H 984	To Floor	56.95	58.45	60.75



"LUCERNE

Sea green; orchid; cool ivory or white. First Quality porcelain enamel is used for tub and pedestal lavatory. Closet is of twice fired vitreous china. Flushes quietly and quickly by syphon jet action—the most efficient closet construction. Recessed tub 30 inches wide has concealed fittings. Lavatory top is 24 by 20 inches; 11 by 16 inch bowl. Faucets in new art line shape plated with tarnish-proof chromium. Cost includes faucets, pop-up waste with trap, supplies and iron pipe connections.

Article No.	Tub Fittings	Lavatory Fittings	5-ft. Tub	5½-ft. Tub.
181 H 255	In Right End	To Wall	\$82.75	\$85.75
181 H 257		To Wall	82.75	85.75
181 H 256		To Floor	83.45	86.45
181 H 258	In Left End	To Floor	83.45	86.45

For corner tub add \$4 to price. Easy Payments, Page 4. Approx. ship, wt. 800 tbs. Not Prepaid. For Estimated Freight Charges see "Bathroom Outfits," Page 3.

Also in Green, Orchid or Ivory. For color add \$24 extra. State color wanted.

What's new and smart in LAVATORIES...



MODART—Chromium Plated Legs Glistening Porcelain Enamel - In Colors or White

\$4295

Here is a new table-top Lavatory—one of the smartest of today's styles. You can see the influence of modern art in its smart, simple lines—in the cut-off corners and beveled edges that reflect the light on glistening surfaces, in the graceful chromium-plated legs, and in the chromium-plated fittings that stay bright. Single stream mixing Faucet, pop-up waste, and indexed cross metal faucet handles. Supply pipes with stops and heavy, 17 gauge trap, with clean-out are fully chromium-plated. Slab and bowl are all First Quality Porcelain Enamel fused onto cast iron; choice of snowy white or lovely tints of green, orchid or ivory. Generous size top 30 by 22 inches, bowl 16 by 11½ in; 4¾-inch pack. Approximate shipping weight 150 pounds. For Estimated Freight Charges see "Lavatories" on Page 3. Shipped promptly Not Prepaid from factory near Pittsburgh, Pa., only. White or green, orchid or ivory. State color.

Colors \$65.45 49.95 281 H 564—Complete with fittings to wall
281 H 563—Lavatory only. No fittings



Bathrooms aren't a matter of pipes and porcelains any more-modern ones have gone in for color and gaiety and comfort. Lavatories have new lines, new colors, new decorative features—all at attractive moderate prices.

In bringing you smartness, we haven't sacrificed the quality that means smooth running, instant response—quality even in the things you cannot see. All Lavatories furnished with hangers for attaching to wall and instructions for installing.



CLASSIC . . . Pedestal

Stainless Vitreous China

Stainless Vitreous China

\$3595
Fresh and sparkling as a fine china dish—it is all twice-fired Vitreous China. Slab and pedestal are octagon shaped and smartly paneled. Picture it in your bathroom—pale green or in white or ivory if your walls are colorful. Single stream mixing faucet with pop-up waste, supply pipes and traps are chromium plated. Top 27 by 22 inches; basin 18 by 11 in. Shipping weight 120 lbs. Not Prepaid. Shipped only from factory near Pittsburgh, Pa. For Estimated Freight Charges See "Lavatories" on Page 3, 281 H 546—Complete with fittings to wall.

281 H 546-Complete with fittings to wall. 69.95 Green, orchid or ivory. State color



ALMA ... Vanity Top First Quality Enameled Iron

First Quality Enameled Iron

\$2795

The last word in enameled iron lavatories. See the set-back of lits smart vanity top, the new angles of its octagon-shaped basin, the smooth planes of its Vanity top provides room for lotions, creams etc., a tiny rim keeps them from slipping off. Fittings are all chromium plated and are recessed into shelf of fixture out of the way. Mixer faucet, indexed metal handles, and pop-up drain. Stops on supply pipes. Trap is not furnished. Top 24 by 21 in.; basin 16 by 11 in. Approx. ship. wt. 100 lbs. White Shipped from stock, Color from Chicago, or factory near Pittsburgh, Pa. For Estimated Freight Charges see "Lavatories" on Page 3.

181 H 559—Complete with Fittings to wall. White \$27.95 Colors: Green, orchid or ivory. State color. 31.95



DUDLEY ... Compact, Serviceable

Costs remarkably little all complete, and you can install it yourself. We'll tell you how.

First quality porcelain enamel fused onto one-piece cast iron. Top is 17 by 19 inches... bowl is 10 by 14 inches.

Fittings include chromium plated faucets with indexed metal handles, trap and supply pipes and stopper and chain. Shipping weight 85 pounds. Shipped from Chicago. See Est. Frt. Charges under "Lavatories" on Page 3.

White only.

181 H 503—Complete with fittings to wall.\$10.00 181 H 504—Complete with fittings to floor. 10.50 181 H 500—Lavatory only. No fittings.... 5.25



ROLL RIM . . . Thrift Special

\$465

Choose this one for the down-stair's washroom. Takes little space and is a great convenience.

Without First Quality Porcelain Enamel. 6-inch back, 2½-inch Roll Rim. Size of top 17 by 19 inches. Bowl 10 by 14 inches. Chromium plated, quick compression faucets with metal handles, traps and aupply pipes. Approximate shipping weight 75 pounds.

See Estimated Freight Charges on Page 3.

Shipped Not Prepaid from Chicago. 181 H 561—Complete with trap to wall...\$9.95
181 H 562—Complete with trap to floor...10.45
281 H 560—Lavatory only........4.65

colors or white

Shipping Points and Freight Information

All white and colored Lavatories, unless otherwise noted, are shipped promptly Not Prepaid from Chicago or Factory near Pittsburgh, Pa.

For Estimated Freight Charges on all Lavatories and Lavatory Closet Combinations, see Page 3.



BEVERLY...Vanity TopVitreous China—Chromium Plated Legs



CENTURY . . . Lavatory and Closet Combination Closet Tank is Concealed in Vanity Top of Lavatory

Just see what this Outfit gives you. First, the very newest style Lavatory, with vanity top, octagonal bowl and smartly paneled pedestal. Second, an up-to-the-minute design in closets. Both in one convenient space-saving unit! Both are twice-fired Vitreous China Stainless -Sanitary in white or pastel tints of orchid, green or soft ivory.

This one outfit would completely transform an old-style bathroom—make it the modern, gleaming, colorful place that modern bathroom ought to be! Do consider it for your own bath or for that downstairs lawatory room. It is compact, complete and costs a lot less than you'd imagine could be possible for such a fine outfit

Every Detail is Planned for Beauty and Efficiency

Leery Detail is Flanhed

It's a new idea—both pieces in one unit the closet
tank in the top of the Lavatory. Does away with a
separate tank and makes it possible to set the closet
nearer the wall. The closet flushing lever is set in
the side of the lavatory.

Lavatory... Vitreous china with chromium
plated fittings. Vanity top for bathroom accessories.
Indexed chromium handles, mixer faucet and popup drain are set into the back—out of the way.
Slab has cut off corners and is smartly paneled; size
24 by 21 inches. Basin is 16 by 11 in. with hidden
overflow. All fittings included.

Closet is Stainless Vitreous china, with smooth,

Above outfit shipped to you FREIGHT F

seamless pyralin-covered seat, chromium hinges and flush connections. Bowl has quiet whirlpool action. 26 in. from wall to front of closet lip, water area 10 by 13 in. Paneled pedestal matches base of lavatory. Instructions for installing included.

Approximate ship. wt., outfit, 175 lbs. 281 H 553-Complete with closet at right.

Green, orchid or ivory. State color 281 H 554—Complete with closet at left. White.....

...\$ 92.00 Green, orchid or ivory. State color Above outfit shipped to you FREIGHT PREPAID from factory near Pittsburgh, Pa.

The SPACE SAVER

Actually saves about three inches of space— an important thing to think about in rooms where every inch counts. Size 26x14 inches. Oval basin is generous size for washing comfort. First Quality Porcelain Enamel. Chromium plated Artline faucets; Chromatage de prost complete with plated trap and pipes; complete with stopper and bead chain. Shipping weight 80 pounds. Not Prepaid.

See shipping points above. Estimated reight Charges under "Lavatories" Freight C on Page 3.

181 H 536-With fittings to wall \$13.95 181 H 537-With fittings to floor 14.45 281 H 535-Without fittings 8.75



The DREXEL

First Quality Porcelain. Generous size top is 24 by 18 in. with deep oval basin 11 by 16 in., 9-inch back and 4½-inch apron. Fittings include Chromium plated faucets with indexed cross metal handles, pop-up waste, supply pipes and trap. Shipped not Prepaid from Stock. Ship. wt. 115 lbs. White only. and trap. Stock. White only.

181 H 528—With fittings to wall\$14.25 181 H 529—With fittings to floor 14.95 181 H 530—Without fittings... 7.45 Same style with stopper and chain 181 H 526—With fittings to wall\$12.25 181 H 527—With fittings to floor 12.75



The DUDLEY SENIOR

Porcelain enamel. Metal Porcelain enamel. Metal Artline faucets. Pop-up waste. Chromium fittings. Top 17 by 19 in; bowl 10 by 14 in. Not Prepaid. Ship. wt. 85 libs. Est. Frt. Rates under "Lavatories" on Page 3. White or orchid, green or ivory. Prices are for white, \$2.00 extra for colors. State color.

extra for colors. State color.

181 H 506—With fittings to wall. \$13.15
181 H 507—With fittings to floor. 13.65
181 H 505—Without fittings... 6.45
Same style but larger; top 18 by 21
in.; bowl 10 by 15 in. Wt. 95 lbs.
181 H 516—With fittings to wall. \$14.25
181 H 517—With fittings to floor. 14.75
181 H 515—Without fittings... 7.45



20th CENTURY—Vitreous China

Stainless. Artline Chromium fittings. Top 20 by 18 in.; bowl 11 by 15 in.; 6-in. back. Pop-up wastemetal faucets. Not Prepaid. Approx. ship. wt. 75 lbs. For green, orchid or ivory add \$5.25 to prices below. State color.

White China Lavatory With Leg (Pictured)
181 H 596—Complete with fittings to wall \$
181 H 597—Complete with fittings to floor.
181 H 595—Lavatory only

See how little it costs to own a FINE MODERN TU

MODERNISTIC RECESS TUB

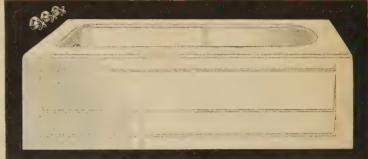
Even the faucets have gone modern, with shiny squared off sides and handles. Tub is of first quality porcelain enamel. Fittings are of dazzling, non-tarnishable chromium. The tub may be had in orchid, green or ivory for eight dollars extra. 30 inches wide; 18 inches deep. Cost includes iron pipe connections. Not Prepaid. State length. For Est. Frgt. Charges, see "Bath Tubs" on Page 3.

White Tub With Fittings in Left End (Pictured)

Approximate ship, wts. complete	465 lbs.	560 lbs.
181 H 730—Tub only without fittings	\$29.75	\$33.75
181 H 736-With Over Rim Fittings	38.50	42.45
181 H 737—With Concealed Fittings	43.00	46.95
White Tub With Fittings in Right E	nd	
181 H 720-Tub only without fittings	\$29.75	\$33.75
181 H 726—With Over Rim Fittings	38.50	42.45
181 H 727—With Concealed Fittings		46.95
If you order tub with over rim fittings and was	nt the adv	rantage of
Trip Lever Waste (81 H 6521 shown on Page 19) as	dd \$3.00.	

Also Green, Orchid or Ivory. For colored Recess Tubs add \$8

\$9975



MODERNISTIC CORNER TUB

If you want to create a sensation, choose this new design in orchid, ivory or green. First quality porcelain enamel with a glass-smooth finish. Fittings in brilliant chromium plate in the new "squared off" art lines. Tub is 30 inches wide; 18 inches deep. Iron pipe connections included. Not Prepaid. Shipping points below. State length. Est. Frgt. Charges, see "Bath Tubs" on Page 3.

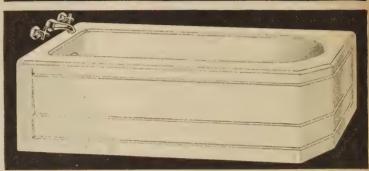
White Tub for Left Corner of Room—Fittings in Left End . 5-ft. . 585 lbs. . \$33.75 . 42.45 . 46.95 Length of Tub. Approximate ship. wt. complete. 181 H 750—Tub only without Fittings. 181 H 754—With Over Rim Fittings. 181 H 755—With Concealed Fittings.

White Tub for Right Corner of Room—Fittings in Right End
181 H 740—Tub Only without Fittings . \$33.75 \$37.50
181 H 744—With Over Rim Fittings . 42.45 46.52
181 H 745—With Concealed Fittings . 46.95 50.75
1f you order tub with over rim fittings and want the advantage of
Trip Lever Waste (81 H 6521 shown on Page 19) add \$3.00.

\$3375

Without Fittings

Also in Green, Orchid or Ivory. For colored Corner Tubs add \$8 extra.



POPULAR LEG-STYLE TUB

Inside and rim are of First Quality Porcelain Enamel. Outside is Inside and rim are of rist Quanty Foretain Lananca. Outside is painted white. "Regular style" brass fittings. Quick compression faucets plated with non-tarnishable chromium. Iron pipe connections included. Not Prepaid. For Estimated Freight Charges, see "Bath Tubs" on Page 3.

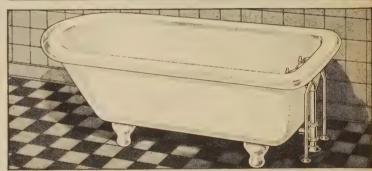
Charges, see "Bath Tubs" on Page 3.

Walton Senior Tub (White Only) Width 30 Inches
Depth inside 17 inches; Roll Rim 3 inches; Height 22½, inches,
Length of Tub. (State Length warted). 4½-ft.
Approximate Ship. Wt. Lbs. 300 340;
181 H 710—Tub without Fittings. \$14.7.5 \$4.7.5 \$181 H 711—With Regular Fittings. 20.05 20.75
181 H 713—With Ideal Fittings. 23.55 42.25

\$ 475

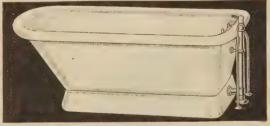
Without Fittings

All Fittings made of Brass. Inside fittings Chromium plated. Outside fittings nickel plated.



BASE **STYLE** \$2095

> Without **Fittings**



No dust can get underneath this tub. It fits close to the floor. Made of solid cast iron. The rim and inside, where most of the wear comes, are covered with "First" Quality Porcelain Enamel. The outside is given a coat of white paint. Width 30 inches; depth inside 17 inches; height overall 22 inches. Inside fittings are plated with non-tarnishing chromium. Outside fittings are nickel-plated. Not Prepaid. State length wanted. For Estimated Freight Charges, see "Bath Tubs" on Page 3. Shipping points shown below.

Estimated Fugin China get, see Length of Tub. State length Approximate Ship. Wt. 1bs. 181 H 700—Tub Without Fittings. 181 H 701—With Regular Fittings. 181 H 703—With Ideal Fittings. 5-ft. 375 \$21.95 27.25 30.75 5½-ft. 425 \$24.75 30.00 33.50 4½-ft. 340



PORT-

ABLE

This portable tub is made of sheet steel. That means it's very strong as well as very light. It is painted with white enamel. Light enough to move around easily—in by the stove for winter bathing, or anywhere else you like. Comes with waste and overflow pipe that can be converted into a permanent connection. Has two holes for water pipes. Sanitary base. Width 27 inches. Height 22 inches. Shipped Not Prepaid from Detroit. For Estimated Freight Charges, see "Bath Tubs" on Page 3. Shipping Points shown below.

Approximate shipping weight 80 pounds.

Length of Tub. 281 H 6223

HOW TO ORDER CORNER TUBS

Face the wall against which the long side of the tub is to be set. If the end of tub is to fit against corner at your right hand, order a right corner tub. If it is to fit against corner at your

order a right corner tub.

Het hand, order a left corner tub.

Be careful, in every case, to stand facing the wall against which the long side of the tub is to set.

Small illustrations at right—show tubs for right hand corner and for left hand corner.

For Easy Payments, see Page 4.

Shipping Points and Freight Charges

All white bath tubs shipped from Stock. Colored Tubs are shipped Not Prepaid from Chicago or Factory near Pittsburgh, Pa. Portable steel tub is shipped from Detroit. For Estimated Freight Charges, see "Bath Tubs" Detroit. on Page 3.





Left Hand

Modern chromium plated faucets. Wall handles mix



Built-in, conceal-ed. Center handle for lifting waste. Chromium plated throughout.



Regular fittings, for leg or base tub. Chain and stopper waste. Chromium-plated faucet.



Standing lift waste replaces chain and stopper. Chrom-ium plated faucet.



An honest-to-goodness SHOWER... and it's only



"Goodness! only \$3.75 . . . what a very low price for a shower" That's what lots of people are going to say when they see this brand-new portable model shower. The new oblong curtain frame measuring 24 by 30 inches is one of the very latest and most practical shower improve-ments. It gives you six extra inches of elbow room. Curtain fits inside the tub, no sloppy floors or soggy bath mats. Has five-foot rubber tube with handy slip-on faucet connection.

Easily installed in ten minutes, even if you aren't handy with tools. We furnish the six screws for fastening to the wall, a screw driver is all you need. Strongly made of heavy brass tubing, plated with bright, non-tarnishing chromium. A good sized shower-head furnishes a generous invigorating flow of water. Complete with screws, brackets, curtain snaps. Curtain Extra. If you've been holding off buying a shower because of the price, here's your chance to buy and save.

Oblong Frame—Chromium Plated

Complete with screws, brackets, curtain snaps and five-foot rubber tube with faucet connection. Ship. wt. 9 lbs.

Ring Type—Nickel Plated

Shower like above with all equipment but with 24-inch round nickel plated frame instead of oblong frame. Ship. wt. 8 lbs. 481 H 6501—Outfit less curtain.....\$3.75 | 481 H 6507—Outfit less curtain....\$2.75

(For the most popular styles of Shower Curtains, see the new selections below)



TWO FIXTURES in ONE

If you want a shower with that invigorating rush of water that quickens the pulse and brings a healthy glow to the body—turn the center handle to the right...if you want a tub-bath with its soothing restfulness—turn the center handless.

dle to the left.

With Concealed Lifting Waste

Outfit of same construction as above and as pictured except spout is concealed below rim of tub, Has four handles, two for mixing water; one for diverter valve for shower; and one lifts waste that is concealed in wall.

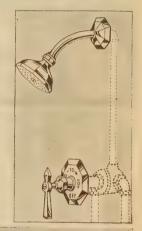
CONCEALED SHOWER

A shower "Bargain" for the built-in tub or shower stall. Center handle is conveniently placed ... you can reach it without stooping. A slight turn to the right or left instantly regulates the flow and temperature of the water best suited to the individual need.

Shower head, arm and flange are in the new "Art Line" design—they blend harmoniously with any type of bathroom fixture. All are brightly chromiumplated...non-tarnishing and very easily cleaned. Shower head with swivel joint permits taking a shower without wetting the hair.

If you haven't a shower, Ward's low, money-saving, mail order price places one within reach of every budget. An extra shower, if you already have one, will be found most convenient.

Valve body has ½-inch tappings at sides and top. Every working part replaceable from face of wall. Pipes not included.



SHOWER and BATHROOM CURTAINS in pastel colors and pretty designs

A LL curtains and drapes on this page (with the exception of the White A (with the exception of the White Duck) are of selected materials chemi-cally treated to resist water. They are mildew proof and will retain their softness after repeated washings and iron-

ings.
No cracking—no sticking. For all re cess and corner tubs and portable showers. Snaps not included. Window drapes have tie backs and valances to

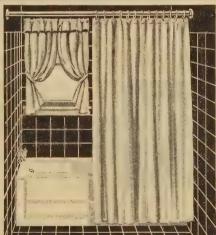
watch.

Your choice of these colors.

Green Orchid Maize State color

High Grade Rayon Taffeta
Unusually fine soft lustrous material. Very serviceable See colors above. Ship. wt. 2 and 3 lbs.
81 H 6568—Shower curtain 6 by 6ft...\$3.69
81 H 6569—Shower curtain 6 by 8½ ft. 5.39
81 H 6570—Drapes 16 by 54 inches... 2.25

Fine Quality Curtains and Drapes Lustrous material heavy weight...serv-iceable. Colors as listed above. Drapes, ship. wt. 8 oz. Curtains, ship. wt. 2 and 3 lbs. State Color.





Rods, Snaps and Holdback Chain (A) 1-inch brass rod for all sizes recess tubs.
(B) All sizes corner tubs. (C) Chromium plated snaps. (D) Chromium plated holdback chain. Complete sets include rod, curtain snaps, holdback chain, and screws.

- 81 H 6530—Nickel plated. Ship. wt., 3 lbs. \$1.65 Complete set.....\$1.65 81 H 6531—Chromium plated. Ship. wt. 3 lbs. Complete set.....\$2.25
- 81 H 6560—Nickel plated, Ship. wt. 6 lbs. \$3.65
- 81 H 6563—Chain and hook......21c



Heavy Cotton Poplin

Bird and foliage design. Heavy weight. Colors: Green; orchid; maize. State

81 H 6578—Shower curtain 6 by 6 ft. Ship. wt. 2 lbs.....\$3,85

White Duck Shower Curtains

Heavy 8-oz. double filled white duck curtains, double stitched. Also fits portable showers at top. Ship. wts. 2 and 3 lbs. 81 H 6518—For all recess tubs....\$1.15 81 H 6519—For all corner tubs.... 1.75



Quality Cotton Broadcloth

Iris and cat-tail design. Green; orchid; maize. State color. 81 H 6576—Shower curtain 6 by 6 ft. Ship. wt. 2 lbs. \$2.59

Good Quality Cotton Broadcloth

81 H 6577—Curtain 6 by 8½ ft... 2.25

Your MODERN HOME Starts Here



Indeed! the bathroom comes first! Make it shine with the smooth hard surfaces of modern fixtures. In colors too: white. orchid, green or ivory. All Ward's Closet Outfits are First Quality Vitreous China—sanitary—stainproof—easy to keep clean. Fixtures in chromium! Modern!-to the minute!

Shipping Points and Freight Charges

White closet bowls, tanks and outfits are shipped promptly from Stock. Colored outfits shipped promptly from Chicago or Warehouse near Pittsburgh, Pennsylvania, whichever is nearer you. For Estimated Freight Charges see "Closets, Sanitary" on Page 3.



REVERSE TRAP ACTION

Similar in design to our highest priced closets. Made of the same First Quality Vitreous China—durable and easy to care for. Supply pipe included. Colonial Design with quiet, quick-acting Reverse Trap Flushing Action. Trap is in rear greatly improving appearance of bowl. Note the large area of bowl which is under water. Bowl and tank are stainless First Quality Vitreous China. Tank has new convenient shelf top. High Quality hardwood seat which will not warp or crack, has bar hinge and rubber bumper. Supply pipes, screws and washers are brass heavily chromium-plated. Rough-in is approximately 14 in. screws and washers are brass heavily chromium-plated. Rough-in is approximately 14 in. (See explanation in "How to Order" at top of page.) Ship. wt. 130 lbs. Not Prepaid. Estimated Freight Charges under "Closets, Sanitary," see Page 3. For Easy Payments see Page 4. 181 H 841—Outfit with Mahogany seat...\$14.45 181 H 843—With White Celluloid Coated Seat and chromium plated hinge.....\$15.45

In Green, Orchid or Ivory. State Color.

181 H 842—Colored outfit, sheet celluloid covered seat to match; chrome hinge.........\$25.25

How to Order Closets



In replacing an old closet, be sure the rough-in (distance from wall to center of drain pipe) is the same as we state in our description. See illustration at left



SYPHON JET ACTION

Flushes quickly and quietly. Easier to keep clean because more of the bowl is under water.

Complete
Colonial design; chromium-plated trimings. Large size bowl; quiet Syphon Jet Flushing Action. Moisture-proof hardwood seats with bar hinges and rubber bumpers. Bowl and "shelf-top" tank of stainless First Quality Vitreous China. Rough-in, 12 inches. Ship, wt. 135 lbs. Not Prepaid. Est. Frt. Charges under "Closets, Sanitary," see Page 3.

181 H 832—White outfit with sheet celluloid covered seat, chromium hinge......\$18.95 181 H 834—With Mahog, fin, seat.... 16.45

Outfits with Cast Iron Enameled Tank
181 H 836—With white sheet celluloid covered seat, chromium hinge \$22.25
181 H 830—With Mahogany Seat. 19.75

Orchid, Green or Ivory Closet Outfits
181 H 835—Seat covered with sheet celluloid in "mother of pearl" finish to match.
Chromium plated hinge. State color. \$29.25



LATEST CLOSET DESIGN Ultra-Modern . . . Compact

SYPHON JET FLUSHING ACTION

Very much smarter than anything on the market. It's all in one unit—closet tank bolts directly to bowl. The tank does not hang from the wall. The total height, only 28½ inches, is at least 8 inches less than the usual outfit. Therefore it fits in places in which it would be impossible to set other outfits. Smart Colonial Design that harmonies with the godern bathpoom fixtures. nizes with the modern bathroom fixtures.

Its whirlpool centrifugal action flushes

Its whirlpool centrifugal action flushes the bowl thoroughly and very quietly in about 7 seconds. Uses about 1/4 less water than the ordinary toilet. Built of stainless First Quality Vitreous China with sparkling chromium-plated fittings including the supply pipe. Sheet celluloid covered hardwood seat. Equipped with chromium-plated bar hinges and rubber bumpers. Extra large bowl with unusually large area under water at all times. Tank has convenient shelf-top. Also sold in Easy Payments. See Page 4. Ship. wt. 125 lbs. Not Prepaid. See Estimated Freight Charges under "Closets, Sanitary" Page 3. 181 H 852---White outfit

Also in Orchid, Green, Ivory. Colored Seat to Match.

181 H 853—State color.....

SYPHON WASH DOWN



\$1345 A good selection—it offers such a lot in appearance

Complete and in satisfaction for such a low price. The tank and bowl are First Quality Vitreous China. A Colonial design with convenient shelf-top tank. The efficient washdown flushing action is shown in small illustration. Supply pipe included.

cluded.

The select hardwood seat will not warp or peel. All seats with chromium plated hinge, and rubber bumpers. Chromium-plated supply pipe, screws and washers included. Rough-in is 14 inches. (See explanation in How to Order at top of page). Ship, wt. 125 lbs. Not Prepaid. Est. Freight Charges under "Closets, Sanitary" on Page 3.

181 H 821-With Mahogany Seat 181 H 823-With White Seat. 13.95



FLUSH VALVE

Popular for homes, schools, office buildings and fac-tories. It repre-sents the latest de-

sents the latest development in the construction of flush valves—it embodies only such features as are necessary for the successful operation of commercial water closets. Operates without a tank—Nothing to get out of order—Length of flush can be adjusted to suit the action of various forms of closets—This adjustment can be made from outside without turning off water supply.

81 H 6595—For top supply....\$13.95 81 H 6596-For back supply.... 13.95



If your closet outfit needs repairs, order at Ward's, repair it yourself and make a double saving. We furnish easy-to-follow instructions. Be sure to read How to Order at top of page where the "rough-in" measurement is explained. First quality vitreous china bowls and tanks. White only. Not Prepaid.

Estimated Freight Charges listed under "Water Closet Bowls" and "Water Closet Tanks" on Page 3.

181 H 810—Syphon washdown style bowl with screws.

Rough-in, 10 inches.
Ship. wt. 40 lbs.

181 H 814—Syphon washdown style bowl with screws.

Rough-in, 14 inches. Ship. wt. 45 lbs.

\$4.95

181 H 805—Syphon jet style bowl with screws.

Rough-in, 12 inches. Ship, wt. 55 lbs.

\$7.95 181 H 808—Reverse trap bowl with screws. Rough-in, 14 inches. Ship. wt. 50 lbs. \$6.00 181 H 819—Vitreous china tank for washdown bowl or reverse trap bowl. Complete with chromium-plated fittings and screws. Ship. wt. 70 lbs. . . . \$6.95

You Can Have the Comfort and Convenience of an INSIDE CLOSET



... Even When You Lack Running Water

SANITARY - ODORLESS

\$495

A blessing for homes without run-A diessing for nomes without run-ning water. . . . A sanitary, odorless Chemical Closet made for indoor in-stallation that costs little and gives great comfort the whole year 'round.

Construction of heavily galvanized sheet steel with 6 gallon removable container inside which makes it simple to keep clean. The three to six month supply of chemical which is furnished, eliminates odors and kills germs. (For additional chemical see below.)

Equipment includes strongly constructed oak seat and lid; steel outer case, 16 in. high by 14½ in. diameter; heavily galvanized six gallon container; seven 12 in. lengths of vent pipe with two elbows; wall collar for vent pipe, toilet paper holder, toilet paper and 1 gallon of chemical.

When Purchasing for Schools Be Sure to Comply With All State Ordinances.

181 H 6447—Complete. Ship. wt. 36 lbs. Not Mailable. Estimated Freight Charges shown under "Closets, Chemical" on Page 3 \$4.95 81 H 6444—Extra 3-inch vent pipe in 12 in. length. Ship. wt. 8 oz 138 H 6450—Extra 3-inch Vent elbow. Ship. wt. 8 oz 14c

Quick Acting Disinfectant Chemical for Indoor Closets

NO HAND EMPTYING

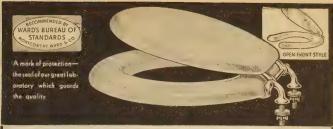
Gives all the comforts and conveniences

Gives all the comforts and conveniences of a regular water closet installation for homes without running water. It is easy to install, sanitary, odorless, and does not require emptying by hand. You just run a pipe to an ordinary barrel buried upside down in the ground outside and chemical action liquefies sewage so it will drain away through the ground. Chemical action is accelerated by the agitator. Enough chemical is supplied to last a family of five persons 3 to 6 months. For additional chemical order No. 681 H 6441 or 6439 above.

You'll like its fine appearance too . . . the closet bowl and vent pipe are steel smoothly enameled; seat and cover are of stained and varnished oak. The tank below the floor line is 14 gauge steel and has a capacity of 25 gallons. It is equipped with agitator which accelerates action of chemical. Complete with 8 feet of vent pipe and elbow, adjustable galvanized roof flange, hood, ventilator cap, toilet paper holder, toilet paper, one gallon of chemical and instructions for installing. Barrel, elbow and pipe to barrel not included. We do not recommend installation less than 100 feet from drinking water supply. Easy Payments, see Page 4. Shipped Not Prepaid from Factory near Racine, Wis. For Estimated Freight Charges see Page 3 under "Chemical Closets."

281 H 6460—25-gal. tank size 14 by 34 in. Ship. wt. 125 lbs. 281 H 6465—65-gal. tank size 24 by 36 in. Ship. wt. 160 lbs.

When Purchasing for Schools Be Sure to Comply With All State Ordinances



WORN CLOSET SEATS Are UNSANITARY

Golden Oak or Mahogany Closet Seats

Mahogany

Satin smooth, hand rubbed finish made of thoroughly seasoned, kiln dried quarter sawed oak or beautifully grained mahogany finished hardwood that will not warp or crack or open at joints. Joint doweled across grain for maximum strength. A real seat with heavy brass chrom-plated hinges! 481 H 6489—Golden Oak. Ship. wt. 8 lbs. 8 oz. ... \$1.49 481 H 6490—Mahogany finish. Ship. wt. 8 lbs. 8 oz. ... 1.49

Sheet Celluloid Covered Closet Seats

Orchid or Ivory. State color

Celluloid Coated Closet Seats

Same construction as above but coated with celluloid composition instead of actual sheet celluloid. Chromium plated brass hinges. Ship. wt. 8 lbs. 481 H 6491—White, Green or Orchid. State color. \$1.95 481 H 6493—Open front style. White only. 2.35

One-Piece Composition—Sheet Celluloid Covered Seats

FROST-PROOF CLOSET

It Will Not Freeze-No Matter How Cold the Weather Becomes

Very simple and positive in operation. Water supply is installed below frost line (about 3 ft.



LOSET SUPPLIES . . . Small Things You Save a Lot on at WARD'S



Brass rod and refill tube, no float. Not Pre-paid. Ship. wt. 2 lbs. 81 H 6483.75c

81 H 6483.75c 81 H 6486— 98c With china seat... 98c Copper Float Ship. wt. 8 oz. 81 H 6485—Each... 15c



Made of heavy live-rubber. Price in-cludes ball with stem. Ship. wt. 4 oz. Not Prepaid. State size. 81 H 6481

Diameter 21/2 12c Diameter 2¾ ..13c



Lead Bend and Ferrule Ship. wts. 16, 18 and 20 lbs. Not Prepaid. 481 H 6850-State

481 H 0850—State
Size.
4 by 12 in. \$2.50
4 by 14 in. . . 2.80
4 by 18 in. . . 3.30
Price is subject
to market changes.



\$17.95

Cast Iron Closet Bend

Diameter 4 inches, length 16 inches. Each side tapped for 1½-inch iron pipe. Adjustable flange. Shipping weight 22 pounds. Not Prepaid. 481 H 6890 98c



Calks into a 4-inch soil pipe. Ship. wts. 10, 9 and 7 lbs. Not 10, 9 and 7 lbs. No. Prepaid.
81 H 6847
4 by 12 in. \$1.65
81 H 6849—4 by 10 inches. \$1.45
81 H 6848—4 by 3 inches. \$1.20
Prices subject to market changes.

Flat

Cups 13c Strong live rubber cup with 24-inch hardwood handle. Ship. wts. 1 and 1½ lbs.

Force

1½ 10s. 81 H 6512— Diameter 4½ inches



AUTOMATIC CLOSET



Complete

Closet Bowl Flush Valve Seat

Requires no tank. Patent valve flushes automatically when seat is lowered and

automatically when seat is lowered and raised.

Has roll rim cast iron bowl, enameled inside and painted outside. Sanitary—easy to keep clean.

Heavily constructed oak finished seat. Equipment includes seat, closet bowl and finished roll by the constructed oak finished seat.

Threaded for ½ inch iron pipe. Ship. wt. 44 bs. Shipped Not Prepaid from Chicago. Baltimore or Albany, For Estimated Freight Charges see Page 3 under "Water Closet Bowls." Charges
Bowls."
281 H 6480—Complete.....\$9.95
281 H 6484—Bowl only tapped for ¾ inch
iron pipe. Ship. wt. 35 lbs......\$5.45

Galvanized Roof Flanges



Forms waterproof joint with soil pipe. Galvanized flange is one piece. Not Pre-

81 H 6888—Galvanized with lead collar. State size. Pipe size. Ship. wt.

81 H 6886-









Sewer Rod

¼ inch flat high carbon blue steel, 25 ft. long. Revolving ball on end facilitates bending for 90 degree elbows reaming out all stoppage. Coil is feed from inside and is easily rewound on frame. Diameter of coil when wound is about 8 inches. 81 H 64472—Ship. 700c 81 H 6472—Ship. 79c



Simply pour in sink, wash basin, etc. and add water. This immediately gives a hot chemical reaction inside the pipe that dissolves grease, lint, etc., removing stoppage. Ship, wt. 1¼ lbs. Not Mailable. Not Prepaid. Bulk prices on request.

681 H 6515— Can	1/4c
Can	LT
3 cans	39c



On one side a Standard Sink—on the other a deep, roomy Wash Tub large enough for a regular washing. One piece Cast Iron covered with First Quality Porcelain Enamel in white, Green or Ivory. Large steel Drainboard is chromium plated to resist rust and acid—can be used on either sink or tub. Sink has 8-inch back and 8-inch apron. Wall hangers and two painted white legs. Complete fittings include beautiful chromium-plated brass mixing Faucet with removable self-draining soap dish—brass nickel-plated Trap and Tubing with connections to either floor or wall. Shipped from Chicago and Factory near Pittsburgh. For Est, Freight Charges see Sinks on page 3. For Colors add \$7.00 to prices above and state color.

Size of Sink, Inches	12 7 17½ 7 20 19 by 21½ 19 by 24½ 410
----------------------	--

Sinks with Right Hand Laundry Tub

arrested and arming of friedings		
281 H 423—To Wall	\$36.65 37.15 27.25	\$41.15 41.65 31.75

Sinks with Left Hand Laundry Tub

281 H 429—To Wall	\$36.65	\$41.15
201 11 X47 10 Wall	φυυ.υυ	
281 H 430—To Floor	37.15	41.65
201 11 100 10 1 1001	. 37.13	
281 H 427—Sink Only	27.25	31.75
and if the one only	41.40	31./3

One Piece Cast FIRST QUALITY

LABORATORY Tests and the experiences of users over a period of years proves that there is no substitute for Cast Iron for Kitchen Sinks. Cast Iron is much better suited than any other metal to a porcelain enamel finish—coats more smoothly . . . holds the enamel indefinitely.

Wards' Sinks are one-piece Cast Iron heavily coated with First Quality Porcelain Enamel-this is why they withstand for years the extremes of temperature and the daily rough usage given Sinks.

You cannot buy better quality at any price-and as you know Wards' Prices quality for quality are always low. We urge you to buy now as prices are rising everywhere and we believe that the prices shown in this book will not be repeated soon again.

Do not let the lack of ready money prevent you from buying now—take advantage of Wards' liberal Easy Payment Plan if you wish-see page 4.

All Wards' Sinks (except the small flat rim sizes) are furnished with steel wall hangers for attaching you may hang your sink to the exact height to suit your convenience and to match the cabinet work in your kitchen.



CONVENIENT ROLL RIM

First Quality porcelain enamel. Faucets, trap and strainer are chromium plated. Faucet handles are metal. Basin is a convenient size. Has 8-inch back, rolled rim. Ship. wts. 95 to 150 lbs. See "Sinks" on Page 3 for Estimated Freight Charges. Without Fittings

Size	181 H 300	181 H 303	181 H 304
Inches	Sink Only	Wall Fittings	Floor Fittings
18x24	\$ 6.25	\$10.15	\$10.65
18x30	7.95	11.75	12.35
20x24	8.75	12.75	13.25
20x30	8.45	12.25	12.85
20x36	11.00	14.95	15.45



Very low priced. Heavy one-piece Cast Iron thickly coated with First Quality Porcelain Enamel inside, painted white outside. Just the sink when tile is used or in connection with built-in cupboards or cabinets. Fittings include chromium-plated high compression brass faucets; chromium plated strainer and trap. For estimated Freight Charges See "Sinks" on Page 3.

Size Inches	Ship. Wt. Lbs.	181 H 370 Sink Only Without Fittings	181 H 373 Trap to Wall	181 H 374 Trap to Floor
18 by 30	135	\$ 9.95	\$13.75	\$14.35
20 by 30	140	10.95	14.85	15.35

Washing is Easier with a Good Tub



Complete

One Piece TUB-STAND, FAUCET and TRAP

No seams, easy to keep clean. Special long-wearing smooth stone composition. Rounded corners to protect fabrics. Metal covered edges for clamping wringer. Width 24 in, depth 16 in, height 34 in, including stand. All tubs fitted with strainers and plugs, bolt and trap collar that fits both 1½ and 1½-in, sink traps. Fittings include steel stand, cast iron trap and swinging spout laundry faucet. Ship, wt. 400 lbs.

Faucet and trap shipped from stock. Stand and the shipped from Chicago or Cincinnati. For Estimated Total Freight Charges see "Laundry Tubs" on Page 3.

281 H 6096—Two compartment tub only.

Length 48 in. No fittings or stand.

\$5.95
281 H 6097—Steel stand only. Ship. wt. 8 lbs.

75c
281 H 6097—Steel stand only. Ship. wt. 8 lbs.

75c
381 H 6703—Swinging faucet for laundry tub. Ship. wt. 5 lbs.

\$1.75

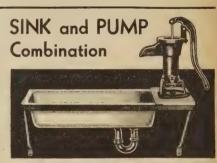
LAUNDRY **Enameled Inside**

Large size heavy cast

Large size heavy cast iron laundry tub with convenient flat rim.

First Quality Porcelain Enameled inside, painted white outside. Can be set up singly; or two or more can be bolted together with wringer attachment between trays. Size of tub is 20 by 24 inches. Depth inside is 14 inches. Shipped from Chicago or Factory near Pittsburgh.

281 H 6692—Complete with painted pedestal. Shipping weight 25 pounds....\$9.95



So little to pay for so much convenience! Handy outfit for the home, cottage or camp without running water—for it saves the drudgery of carrying in water from the outside.

One-piece cast iron sink heavily coated with glistening white enamel inside and painted white outside. Chromium-plated strainer and trap for 1½-in. pipe. Heavy cast iron pump is attractively painted and has convenient pitcher spout. Outfit is complete with steel frame, brackets and mounting board. Easy to install.

For wells up to 20 feet deep. 3-inch iron cylinder with 1½-inch thread. Pipe connections included. Waste and suction pipe not included. State size. Shipped from stock.

For Estimated Freight Charges see "Sinks" on Page 3.

	Shipping	181 H 5901	181 H 5902
Sink, Inches	Weight	Trap to Wall	Trap to Floor
18 by 30	100 lbs.	\$ 8.95	\$ 9.50
20 by 30	132 lbs.	9.50	10.00
20 by 36	154 lbs.	11.50	12.00

ADJUSTABLE SINK LEGS

All our sinks have sturdy brackets or hangers. Many heavy cast iron sinks should have legs also. This model is made in two sizes. One to go under the sink and one for under the drainboard. Length of

leg is adjusted by turning top. White shipped

Order Short or Long Legs Short Leg Under Short wanted. Leg Under or ivory Inly. Mailable but Not repaid. Ship. wt. 14 lbs. 81 H 680—Painted \$1.75 \$1.85 \$1.85 \$1.65 \$2.45	OHI Brook, colored to training			
81 H 681—White Enamel 2.25 2.45	nd state color wanted. Vhite, green or ivory nly. Mailable but Not	Leg Under Sink	Leg Under Drain- board	
81 H 682—Colorea 2.65 3.10	81 H 680—Painted 81 H 681—White Enamel 81 H 682—Colored	2.25		

SINKS . . . are Known for Style

Iron Covered with Porcelain Enamel



The Enamelware Association stamp on Wards' sinks is your assurance that you're buying the best grade of porcelain enamel-ware on the market. All of Wards' Enamelware must pass or excel the grading rules of the Sanitary Enamelware Association and comply with the specifications of the U. S. Bureau of Standards. Years of constant service have proved First Quality enamelware to be the finest finish you can choose for a sink. Solid cast iron is used as a base for all the sinks on this page... this metal is especially suited to a porcelain enamel finish ... because it coats so smoothly and holds the finish.

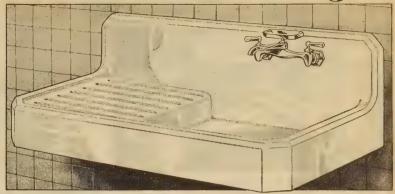
Modern Basket Type Strainer



If you are buying a Crystal or Ellsmere cast iron or steel sink, you're going to want one of these strainers. A deep basket like the coffee container in a percolator, catches refuse; lifts out for emptying by a knob on the top; doesn't soil your hands.

your hands.

Turn the knob to the left and you've a stopper for the sink. Do the dishes in the sink if you wish. Strainer is brass, heavily chromium plated. Diameter, 4 inches, Costs \$2.45 extra and worth it for trouble it saves. Can be had with the Ellsmere and Crystal Sinks only. If wanted add \$2.45 to the price and be sure to State Basket Type Strainer in Your Order.



The NEW "ELLSMERE" Cast Iron White, Green or Ivory

Without Fittings

You may have seen beveled corners and squared-off "artcraft" fixtures in modern bathrooms, but you have probably never thought such smart designs would come into the kitchen. Picture the beauty of Wards' ivory or green sink in this design, think too, how lovely this white sink will look in its new modern shape. (For color add \$4.00 extra to prices below and state color wanted.)

The new Colonial mixing faucet with "art lines" is finished with non-tarnishing chromi-um plate. A large sink basin and drainboard give you plenty of room. Sink back is 8 inches high—low enough to put under a window, near the light—high enough to protect the wall.

Complete with faucet, trap and strainer, chromium plated, iron pipe connections and Wall Hangers. For Basket type Strainer add

Article No. Kind of Fittings		
181 H 327—To Wall	\$21.95	\$30.00
181 H 328—To Floor	22.45	30.50
181 H 319-Sink Without Fittings.		
White Sink With Left Hand	Drainb	oard
181 H 325—To Wall	\$21.95	\$30.0
181 H 326—To Floor	22.45	30.50
181 H 318-Sink without Fittings.	15.75	23.7
See "Sinks" on Page 3 for Est. F	reight C	harges



WARDS' POPULAR SELLER

First quality porcelain enamel.
Non-tarnishing chromium-plated faucets with Metal handles, trap and strainer. Low 8-inch back.
Without Fittings

Estimated Freight Charges on "Sinks" see Page 3. Length of Sink, inches.
Size of Sink Basin, inches.
Size of Drainboard, inches.
Ship. wt. lbs. Not Prepaid..... 42 20x20 20x22 160

White Sinks With Right Hand Drainboard

Art. No.	Kind of Fittings		
181 H 385 181 H 386 181 H 387	To Wall	17.15	\$21.35 21.85 17.45
	Sink With Left Hand I		
181 H 375	To Wall	\$16.65	\$21.35
181 H 376	To Floor	17.15	21.85
181 H 377	Sink without Fittings	12.75	17.45

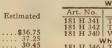


CRYSTAL DOUBLE DRAINBOARD

Plenty of room for everything. This handsome model is of cast iron heavily coated with lustrous first quality porcelain enamel. Fittings are all chromium plated including the convenient mixing faucet with handy swinging spout. Removable self draining metal soap dish and unbreakable metal faucet handles. Sink is 60 inches long, and has deep 22 by 22-inch basin and two 19 by 22-inch drainboards. 8-inch back and 6-inch apron. Offered in White, Green or Lydy.

For basket type Strainer shown above add \$2.45.

CAST-IRON WHITE SINK. Ship. wt. 300 Freight Charges see "Sinks" on Page 3.	lbs. For Estimated
181 H 398—With Fittings to Wall. 181 H 399—With Fittings to Floor. 181 H 397—Sink Without Fittings.	
For Cast Iron Sink in Green or Ivory add wanted.	\$7.50 extra. State color





HAMPTON CORNER SINK

The 8-inch end and back protect your walls. First Quality Porcelain Enamel. Chromium mixing faucet, spout without Fittings in use. Hangers and Instructions included.

Art. No.	Kind of Fittings		
181 H 341	To Wall	\$25.15	\$31.95
181 H 342		25.65	32.45
181 H 340	Without Fittings	19.95	26.75
V	Vhite Sink for Right Ha	nd Corner	-
181 H 346	To Wall	\$25.15	\$31.95
181 H 347	To Floor	25.65	32.45
181 H 345	Without Fittings	19.95	26.75



STEEL FLAT RIM SINK

Similar to Flat Rim Sink at right except that it has base of steel. Enameled inside with first quality, acid-resisting porcelain enamel. Outside is also covered with smooth rust-resisting white porcelain enamel. Furnished only in white.

Estimated Freight Charges under "Sinks" on Page 3. Steel Acid-resisting white Porcelain enamel.

Size	Ship.	181 H 192	181 H 195	181 H 196
Inches	Wt.	Sink Only	To Wall	To Floor
16x24	15 lbs.	\$3.25	\$5.25	\$5.75
18x30	20 lbs.	3.75	5.75	6.25
20x30	22 lbs.	4.25	6.25	6.75



CAST IRON FLAT RIM SINK

Enduring Cast Iron. Inside, it's spot-less white porcelain enamel. Outside, where it won't show, it's neatly painted white. Build a cabinet for it yourself. Without Fittings

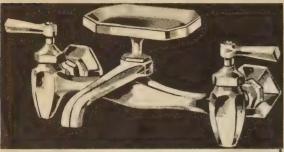
Opening for 1½-inch strainer like 81 H 6876, Page 18. Not Prepaid. For Estimated Freight Charges see "Sinks" on Page 3.

Size Inches State Size	Ship. Wt. Lbs.	181 H 692 Sink Only Strainer Not Included		Complete and Trap 181 H 696 To Floor
16x24	44	\$3.95	\$5,95	\$6.45
18x30	65	4.50	6,50	7.00
20x30	71	5.00	7,00	7.50
20x36	87	6.95	8,95	9.45



SINK BACKS and DRAINBOARDS

SINK BACKS and DRAINBOARDS
Make your flat-rim cast iron
sink up-to-date. Heavily coated First Quality Porcelain Enamel. Drainboard gives you a
place to put dishes. Back keeps
the walls from getting soiled.
Easy to attach. Same drainboard is used for right or left
side. Cannot be used on Steel Sinks.
181 H 664 —White enameled Sink Back. Faucet holes 8
inches apart. Use only with 30-in, size flat cast iron rim
sinks. Ship, wt. 42 pounds.
\$3.25
181 H 668 —Drainboard 24 in. long. For cast iron sinks 18
in, wide. Ship, wt. 41 pounds.
\$4.45
181 H 669 —Drainboard 24 in. long. For cast iron sinks 20
in. wide. Ship, wt. 46 pounds.
\$4.95
Estimated Freight Charges see "Sinks" on Page 3.



Colonial Design Mixing Faucet

You'll get more pleasure out of this heavy, modern Sink Faucet than from almost anything you ever bought for your kitchen. It mixes the water and delivers it from a single spout at just the temperature you want. And the spout (with removable strainer) swings from side to side! Also note the improved position of the spout, it's mounted on top of the fixture so you can set a pail under it.

A beautiful design. Heavy cast brass with bright chromium plating, Removable self draining soap dish. Indexed unbreakable metal handles. Threaded for ½-inch iron pipe connection. Will fit all standard sinks. Mailable but Not Prepaid. Ship. wt. 5 lbs.

81 H 5505-Chromium plated.

Mixing Faucet Fits All Sinks

Chromium Plated

Another new sink mixing faucet—modern in design and with the latest improvements. By all means, get one. It mixes the hot and cold water in a single stream.

easily attached, you can do it yourself. All you need is a wrench.

This one is cast brass with brass handles and self draining removable brass soap dish—all chromium plated. The spout swings to either side and is mounted on top of the fixture to give increased clearance for utensils in the sink. This is an improved feature.

Threaded for ½-inch iron pipe connections. Adjustable flanges spaced 8 inches apart. Mailable but Not Prepaid. Ship. wt. 5 lbs. 81 H 5499 -Chromium plated...



Unusual Quality At This Price

Here's a new bathtub faucet at bathtub faucet at an extremely low price. A little lighter in weight than the one at the right, but well made and efficient. Plated with non-tranishing chromium. Quick compression operation. Easily installed, all you need is a wrench. Handles marked "H" and "C." May be installed, in any leg or base styletub. stalled in any leg or base style tub.

81 H 5467—Ship. wt. 2 lbs..\$1.10

Tailpieces for Bath Faucets
81 H 5439—Tailpiece threaded for ½-in. supply pipe connection, ¾-in. faucet

New-Beautiful Modern Design

A beautiful faucet for the bath-tub. Designed on the same modern lines as our new Lavatory fix-

Heavily chromium-plated— non-tarnishing.

New modern metal handles indexed "H" and "C" and prac-tically unbreakable. Quick com-pression operation.

Easily imstalled in any leg or base style tub. Standard thread-ed for connections to water sup-ply pipes. Shipping weight 2 lbs. 12 oz.

81 H 5477.....\$2.19

Sink and Lavatory Bibb Reseater

Saves money and time Repairs any 36, 1/2, 3/4 or 1-in. compression faucet on sink, lavatory or tub. Mailable but Not Prepaid. Ship. wt. 1 lb. 81 H 6715 98c

Faucet Washers One dozen composition

b e v e l e d washers o f assorted sizes screws. Mailable but Not Pre-paid. Ship. wt. 8 oz.

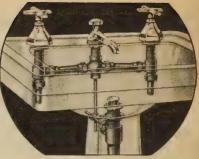
SINGLE STREAM LAVATORY FAUCET

Convenient! Permits you to mix hot and cold water so that it runs from a single faucet at just the temperature you want. You can wash with running water, there being no necessity for using stopper and mixing the water in the bowl. The convenient pop-up waste, so much handier than the old style chain and stopper.

Attach to any lavatory having openings for separate faucets and pop-up waste. Slip joints permit adjustment to fit slight variations between openings in lavatories.

Complete with heavy brass pipe and connections shown in picture. Shipping weight \$745
81 H 5468—Mailable but Not Prepaid.

8½ pounds. 81 H 5468—Mailable but Not Prepaid.



Very Modern . . . Heavy Brass Thickly Plated with Bright Tarnish Proof Chromium



Modern—tarnish proof chromium-plated faucets. Cross-metal handles, indexed H and C. Removable seat can be lifted out by unscrewing head, making it possible to replace the only part which wears eventually. Fits practically all lavatories. Tail pieces for ¼-in. pipe connections. Shank threaded ½-in. Ship. wt. per pair 2 lbs. 8 oz. 81 H 5450—Per pair\$2.49

and Removable Seats

249

A Pair Metal Lever

Handle

Lavatory Faucets

Compression action faucets. Fit all lavatories

... Well made of heavy
cast brass for years of
service. Heavily plated
with sparkling non-tarnishing chromium,
Choice of metal Lever or 4-Ball Metal
Handle. Indexed "Hot" or "Cold." For
iron, lead or nickel plated supply pipe connections. Ship, wt. 1½ lbs.

Metal Lever Handle Faucet

81 H 5453—"Hot." Each.......98c 81 H 5454—"Cold." Each......98c

Four-Ball Metal Handle Faucet 81 H 5462—"Hot." Each.......98c 81 H 5463—"Cold." Each.....98c

Lavatory and Sink Traps For every requirement. Use with all Standard Sinks and Lavatories. Made of 17 or 20-gauge Brass Tubing nickel plated or chromium plated. Complete with flanges. All 17-gauge traps have cleanout plugs. Priced low because we sell direct. Mailable but Not Prenaid.

LAVATORY TRAPS-17-Gauge-11/4-in. diameter
 Ship. wt. 2½ lbs.
 Nickel Plated
 Chrome Plated

 S Trap to Floor
 81 H 6616...\$1.65
 81 H 6606...\$1.95

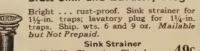
 P Trap to Wall
 81 H 6617...1.20
 81 H 6607...1.45

LAVATORY TRAPS-20-Gauge-11/4-in. diameter Nickel Plated | Chrome Plated | 81 H 6601 . . . \$1.69 81 H 6613 . . . 1.00 | 81 H 6603 . . . 1.35 Ship. wt. 2½ 1bs. S Trap to Floor P Trap to Wali

SINK TRAPS—17-Gauge—1½-in. diameter
vt. 3½ lbs. Nickel Plated Chrome Plated
to Floor 81 H 6887. \$2.15 81 H 6887. \$2.45
to Wall 81 H 6877. 1.40 81 H 6887. 1.65 Ship. wt. 3½ lbs. S Trap to Floor P Trap to Wall

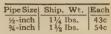
SINK TRAPS-20-Gauge-11/2-in. diameter Ship. wt. 3½ lbs. S Trap to Floor P Trap to Wall Nickel Plated | Chrome Plated 81 H 6874 . . . \$1.50 | 81 H 6884 \$1.98 81 H 6870 . . . 1.00 | 81 H 6883 . . . 1.55

Brass Sink and Lavatory Plug



 Heavy Brass well polished. Metal handle. For ½ or ¾-inch pipe. Ship. wts. 1¼ and 1½ lbs. Mailable Not Prepaid.

81 H 5443--State size.



Has hose connection. Ship. wt. 1½ lbs. Mailable, Not Prepaid. State size.

Finished Cast Brass Pipe Size, In. 1/2 81 H 5442 49c

Rough Nickel Plated

Pipe Size, In. 1/2 81 H 5444 45c

Made of cast brass, chrome-plated. Indexed handle. Adjustable flange. Ship. wt. 1½ lbs. Mailable but Not Prepaid. State size. 81 H 5487—"Cold." ½-in...\$1.35 81 H 5486—"Hot." ½-in...\$1.35

Heavy cast brass plated with bright nickel or sparkling chromium. Solid white china lever handles . . . quick compression action. Threaded for ½ or inn. Threaded for ½ or 3/4-inch pipe. Ship. wt. 1½ lbs. Mailable but Not Prepaid, State size.



TO!	Chromium Plated			
Pipe	81 H 5480	81 H 5481		
Size	"Hot"	"Cold"		
½-in.	98c	98c		
¾-in.	\$1.10	\$1.10		

Lavatory Supply



Chromium or Nick el plated brass with flanges and con-nections for faucet.

Wall Supply Pipes 81 H 5101—Nickel
Plated. Per Pair
81 H 5103—Chromium Plated.
Per Pair
\$1.00

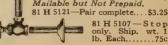
Floor Supply Pipes

Shipping weight 3 pounds.

81 H 5102—Nickel Plated. Per Pair. \$1.05

81 H 5104—Chromium Plated.

Supply Pipe With Stop Chromium plated brass. Complete with wheel handle stops, flanges and reducing couplings. 3/6-inch iron pipe size. Ship. wt. 2 lbs. Mailable but Not Prepaid.



81 H 5107 — Stop only. Ship. wt. 1 lb. Each......75c

to keep the Bathroom tidy



Insert Cabinet With Venetian Mirror

Behind this beautiful etched Venetian glass mirror there is a big medicine cabinet with three ample shelves. This cabinet serves the double purpose of being a hand-some decoration and a useful bathroom fixture.

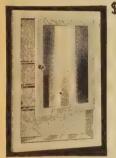
The mirror is of heavy flawless plate glass, beveled on all edges, and securely fastened to the door of the cabinet. The gracefully curved top is etched with a delicate scroll design.

white enamel that is easy to clean and will not crack. Three roomy plate glass shelves, razor blade drop and tooth brush holder are included. The entire cabinet sets into a wall opening 15% inches by 21% inches by 31% inches dep. Mirror is 18 inches by 26 inches. Mailable but Not Prepaid. Shipping weight, 42 pounds. See Page 3 for shipping information. 481 H 1850.....

Medium Size Cabinet—Two Glass Shelves

Has same beautiful mirror and same fine construction as cabinet above. It's slightly smaller and has two glass shelves. Sets in wall opening 13½ by 19½ by 3 in. deep. Mirror is 16 by 24 in. Shipping weight, 30 pounds.

481 H 1855-Complete, ready to install. Mailable.....\$7.85



\$650 Steel Cabinet Attractive-Roomy

Low Priced

Here is one of those nice, big medicine cabinets that holds simply everything. It has space for the accommodation of every one of those little articles, powder boxes, medicine bottles, shaving things, etc. that tend to make bathrooms untidy. The cabinet is constructed entirely of strong steel, finished completely in a white enamel that is as permanent as it is beautiful. Its attractiveness and usefulness are enhanced by the big % length, heavy plate

ness and usetumess are enhanced by the big ¾ length, heavy plate glass mirror, 14 by 18 inches and the three deep glass shelves. The in high by 3% in. deep. Mailable. Shipping weight 45 pounds. For Shipping Information See Page 3.

481 H 1836—Complete, ready to install...............\$6.50

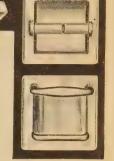
MEDICINE CABINETS BUILT IN FIXTURES ARE MODERN AND



Instead of being attached to the wall in the usual way, they're set in permanently like the modern recess medicine cabinets. Made of the same durable porcelain enamelware and with the same superior workmanship as our fine bathtubs and lavatories... They will never lose their beautiful, lustrous finish.

Simple instructions included tells how to make niche in wall and secure fixtures permanently with excelsior and plaster of paris. You can do it easily, quickly and neatly yourself.

Diagram at left shows how they fit—note how lip of fixture extends over opening in wall con-cealing any ragged edges in the tile. The Soap Dish with Grab Bar is also wired in for additional



See How Stunning These Fixtures Look in the Bathroom on Back Cover

Recess fixtures are furnished in either white or black. We maintain a special service, however, that enables you to match any solid color tile at a small extra cost. Write for information and include sample of your tile.

The towel bars are enameled iron %-inch square in 18-inch and 24-inch lengths. The other fixtures are all 6 inches square and 1 ½ inches deep.

All recess fixtures are Mailable but Shipped Not Prepaid from Factory in Chicago, Illinois. See Page 3 for postage rates and shipping information.

State clearly number, size, and color wanted.

Number and Name	Ship. Wt.	Each
281 VH 1900—Soap Dish	4 1/2 lbs.	\$1.50
281 VH 1901—Tumbler Holder	4 1/2 lbs.	1.50
281 VH 1902-Tissue Holder	4 lbs.	1.50
281 VH 1903-Tub Soap Dish and		
Grab Bar	5 1/2 lbs.	1.95
281 VH 1904—18-in. Towel Bar.	2 3/4 lbs.	1.75
24-in. Towel Bar	3 lbs.	1.95



Complete

Set of Five **Pieces**

\$100 Complete Set of Five **Pieces**

Enameled Wire—White and Green

Each piece is well made of heavy wire, enameled white with little touches of green trim. They are attractive and durable. Complete with screws for attaching. Ship. wt. each piece, 4 oz.

81 H 1621—Wall Soap Dish	.100
81 H 1620—Bath Tub Soap Dish	.100
81 H 1622-Tooth Brush and Tumbler Holder	.100
81 H 1623—Toilet Paper Holder—Wood roller	.100
81 H 1624-161/2-inch Towel Bar	.100
81 H 1625—Complete Outfit of five pieces	

Solid Vitreous China—Non-Tarnishing

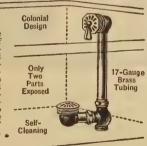
Each piece is hung on concealed hangers. Quickly cleaned and replaced. Complete with hangers and screws. Choice of white, green or black. Easily attached. Ship. wt. each piece, 1 lb. State color.

81	H 1550—Wall Soap Dish1	5c
81	H 1551 —Tumbler Holder	5c
	H 1552 -Toothpaste and Toothbrush Holder 1:	
	H 1553—Toilet Paper Holder—wood roller2	
	H 1554—18-inch Towel Bar—pyroxylin bar3	
81	H 1522—Complete Outfit of five pieces \$1.0	0

BATHTUB SUPPLIES

Trip Lever Waste and Overflow

A fixture that will add to the appearance and convenience of any tub having over rim fittings. Eliminates chain and tings. Eliminates chain and stopper. Waste stop is operated by trip lever and is absolutely water-tight when closed. Easy to install and can be adjusted from the outlet faces. Overflow pipe is self-cleaning; will not clog. Trip lever and face openings are chromium-plated. 1½-inch, 17 gauge brass tubing. Ship. wt. 6 lbs. 8 oz.
81 H 6521—Each. \$4.45



Bath Tub Waste and Overflow

Brass, nickel or chromium plated. With rubber stop-per, chain and floor flange. 1%-in. tail piece. Mailable. Ship. wt. 3½ lbs. See Page 3 for Shipping Information. 81 VH 6520—Nickel. \$1.55 81 VH 6523—Chrome 1.95



Cast Iron Drum Trap

For 1½-in. iron pipe, Size 4 by 8½ in. Mailable, Not Prepaid. Shipping weight 6 pounds.

Bath Tub Supply Tubing

Seamless brass tubing finished in nickel or chromium. Ground joints fit bath faucets. With floor With 1100 r
flanges and connections to ½nections to ½Length, 20 in.
Mailable. Ship. wt. 2
lbs. See Page 3 for Shipping Information.

AG

81 VH 5112—Nickel. Per Pair\$1,00 81 VH 5109—Chromium. Per Pair\$1.35

ENAMELED IRON Acid-Resisting



or orchid. State color

81 H 1801-Each.

Bath Tub Soap Dish



Tooth Brush and Tumbler Holder

popular modern design fixture. Has space for four brush-es and tumbler. With screws and concealing caps. In white, green or orchid. Ship. wt. 11/2 lbs. Mailable. 1½ lbs. Mailable. State color. 81 H 1815.....55c

Opal

Glass



With screws and concealing caps. Ship, wt. each 14 oz. White, green or orchid. State Color

81 H 1809—Ea.. 10c 6 hooks 55c

Wall Soap Dish



Enameled iron frame with Enameled from frame screws and concealing caps.
White fixture has removable class tray. Green and glass tray. Green and orchid fixtures have vitreous china trays to match. Ship, wt. 1½ lbs. State color.

81 H 1802—Each.....65c 81 H 1803-No tray....35c



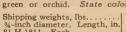
A necessity in fine bathrooms. Opal glass shelf in white only. Steel brackets with screws and concealing caps come in white, green or orchid. Ship. wts. 5 and 6 lbs. State size of shelf and color of

.60c

 brackets.
 81 H 1810—Shelf 5 by 18 inches.
 \$1.00

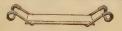
 81 H 1810—Shelf 5 by 24 inches.
 1.15

Steel Towel Bar



Cast iron brackets with screws and caps, green or orchid. State color.

pping weights, lbsinch diameter. Length, in. H 1811—Each.	15 39c	2½ 18 45c	3 24 55c
-in. diameter. Length, in.	18	24	30
H 1812—Each		69c	80c



Bath Tub Seat

Hardwood seat. Heavily coated white enamel. Rubber covered hangers prevent slipping and scratching. Ship. 81 H 6407—Each.....89c



Polished hardwood roller. Easily and quick-ly filled. Enameled iron brackets with screws and concealing caps. White, green or orchid.

81 H 1808—Ship. wt. each 14 oz.....23c

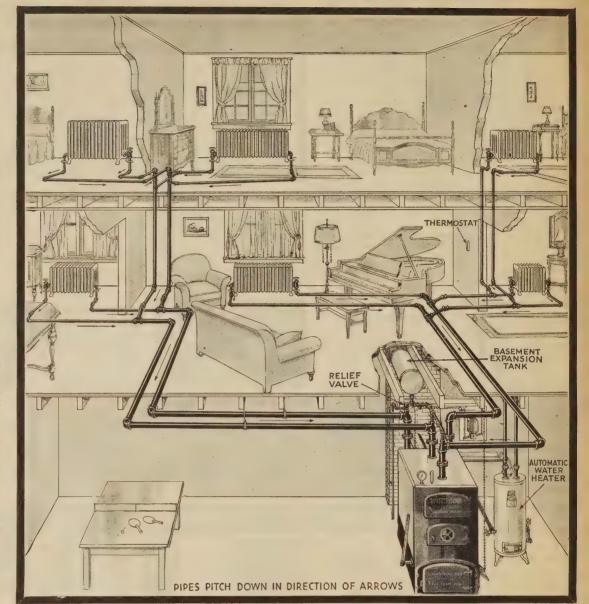
Steel Bath Stool

With rubber seat pad and rubber crutch

tips on legs.
Ship, wt. 6½ lbs. White green or orchid. State 481 H 1574—Each

c MontgomeryWard Ho

WARD'S Windsor HOT WATER SYSTEM



PICTURED here is a Windsor Hot Water Heating System, installed in a home of moderate size. It was planned and laid out by Ward's Heating Engineers, and embodies all features needed to give perfect heating comfort in the home. A hot water system is featured by its quiet, uniform heat, cleanliness and ease of control.

The electric thermostat heat control and automatic water heater are, of course, optional and can be installed with any heating system.

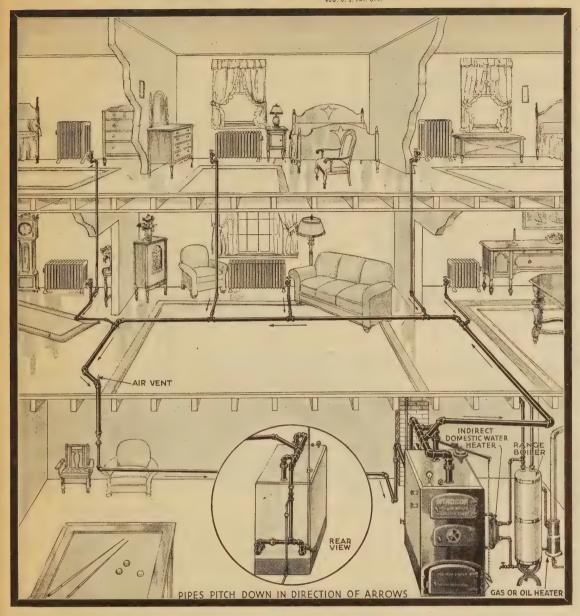
IN A hot water heating plant the entire system—radiators, pipes, boiler—is filled with water. It operates on the principle that warm water is lighter than cold, which causes the heated water to rise and circulate through the system.

When a fire is started in the boiler, water surrounding the fire pot is heated and rises to the top. It continues to rise through the pipes connected to the top of boiler until it reaches the radiators, where much of its heat is radiated by the metal and transferred to the air in the room. At the same time a freshly heated quantity of water is rising from the boiler, so the cooled water in the radiators flows back to the boiler through the return pipe. Here it is again heated, and once more starts on its journey through the system, absorbing heat from the fire and transmitting it to the air in the rooms above. The system is protected against excessive pressures by a relief valve. See page 40.

The thermostat used in this installation is connected to a clock. Set it, once and for all, so it will hold any desired temperature during the day and then allow the home to cool ten or fifteen degrees during the night. In the morning it will automatically open the drafts. All you need to do is fire the boiler, remove the ashes, and set the thermostat at the temperature you wish. See page 32 for thermostats.

The automatic heater is connected to the boiler by a heating coil (See Page 33) which supplies all the hot domestic water necessary when boiler is in operation. However, during spring and fall months fire in boiler is held at a lower point and during the summer it is allowed to go out entirely. When fire in boiler is too low to provide an adequate supply of hot water, the automatic heater will go to work and keep a tank full of piping hot water. On pages 44, 45 and 47 are complete descriptions of all types of automatic heaters.

WARD'S Windsor STEAM SYSTEM



THE STEAM heating plant shown here was carefully planned by Ward's engineers to give the maximum in heating efficiency. They will design a similar system for your home. A steam system gives quick heat and is particularly suitable where a control of individual radiators is desired. When the radiators are equipped with vacuum valves, this makes an unusually efficient installation.

IN A STEAM heating system, only the boiler contains water. This small quantity of water is quickly brought to a boil and changed to steam, which rises through pipes to the radiators, forcing the air ahead of it. There is no water in radiators or pipes except the small quantity of condensation from steam in the radiators. Air vent at the end of the main and the valves on each radiator permit all air to escape rapidly but close instantly when reached by live steam, thus preventing the loss of water or steam from the system. Main vent is not absolutely necessary, but it increases the efficiency of the system by expelling air and allowing steam to fill entire main and rise in all radiators simultaneously.

As steam in the radiators gives up heat to the room it condenses and becomes water again and returns to boiler where it is again converted into steam, repeating the process.

To maintain a uniform working pressure all Windsor steam

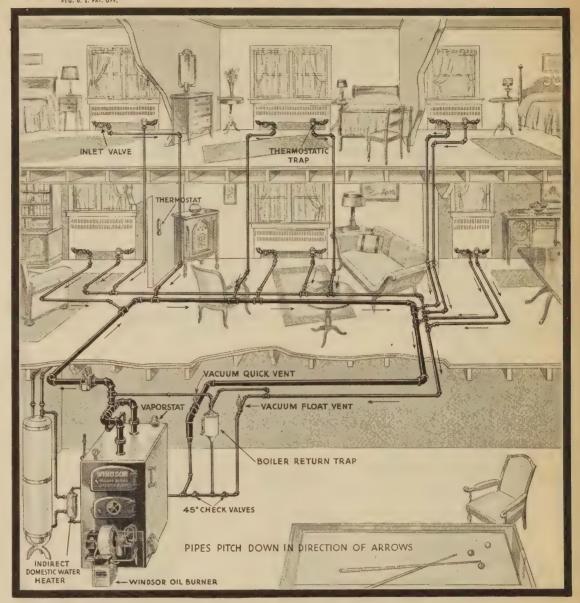
boilers are equipped with automatic damper regulators which check the fire at any desired pressure. As heat is given off in the house the pressure falls, and the regulator again opens the drafts. Each Windsor boiler is also equipped with a safety valve.

Windsor one pipe steam systems are designed by our Engineers to eliminate objectionable noises.

Every Windsor Steam System can be equipped with vacuum vent and radiator valves. These cost slightly more than standard valves, but will more than pay for themselves in fuel saved. These Valves are shown on Page 40.

The domestic hot water supply system shown here consists of an insulated range boiler (see Page 46) with a gas or oil heater for summer use, and an indirect heater which supplies hot water during the heating season without firing the auxiliary heater. See Pages 33 and 45.

WARD'S Windsor VAPOR SYSTEM



WINDSOR Vapor Heating System combines all the good features of Windsor Steam and Hot Water Heating. It provides for instant heat in any radiator and permits individual control of each radiator. When installed as designed by our Engineering Department, it is absolutely noiseless in operation. Under a declining fire a very strong vacuum is created causing the water in the boiler to continue to vaporize for considerable periods and give up heat to the radiators.

EACH radiator in a Vapor System is equipped with a packless valve on the supply end for control of the radiator and a thermostatic trap on the return end which permits the water to return to the boiler only after it has given up its useful heat to the room.

The concealed copper radiators, shown in this particular installation, are built of seamless copper tubes with copper fins to permit rapid radiation. They can be furnished to be built into the walls of a new house or concealed in a standing floor cabinet for homes already built. Concealed copper radiation heats by convection and gives a more uniform and evener distribution of heat than any other type of radiation. See Page 36.

The Windsor Oil Burner is fully described on Page 35. When installed as shown above it is controlled by a thermostat and clock to give the desired temperature during the day, lower temperature at night, and raise it again in the wee small hours before you get up. It is also connected to

the indirect heater and range boiler to give all the hot water you want, without the need of an automatic heater.

In the summer the burner still operates to give domestic hot water at a lower cost, in most localities, than the cost of gas. In this summer-winter system if a sudden cold snap should occur in mid-summer the burner will immediately supply heat to the home above.

If, in severe weather, a door or window were carelessly left open so that the demands from the thermostat on the heating system might cause too high a steam pressure, a protective Vaporstat will automatically turn off the burner. In the summer the burner is regulated by the demands of the domestic hot water supply. Truly, the controls on this system are so remarkable that they seem to operate with human intelligence.

Of course, a vapor system can be installed with a coal or gas burning boiler, and cast iron radiation just like steam or hot water.

WARD'S Windsor PIPE FURNACE

THE principal advantages of a pipe furnace are the almost instant heat it gives when a fire is started, the ventilation provided from constant air circulation, and the register adjustments which make it possible to control the temperature in each room individually.

When air is heated it expands and becomes lighter than the cold air surrounding it. This principle is well illustrated by the warm air balloons sent up on the 4th of July. In these the warm air is imprisoned in the paper balloon, and in rising carries the balloon with it.

A Constant Circulation of Heated Air

A pipe furnace consists of an efficient heater surrounded by a closed casing of sheet steel. From the top of the casing, pipes are taken to registers in the different rooms of the house. Return, or cold air pipes are connected with registers in the floor of one or two downstairs rooms and lead to the bottom of the furnace casing.

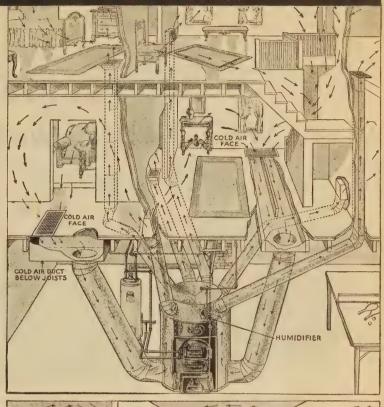
When a fire is built in the furnace, air in the casing is heated and rises through the warm air pipes to the rooms, being replaced by the cold air which enters the casing through the cold air return pipes. This circulation provides for healthful ventilation in every room.

Healthful Moist Heat All Winter Long

Every Windsor furnace is equipped with a built-in water pan. As air circulates through the system it absorbs moisture from the pan and overcomes much of the excessive dryness that is always caused when cold outside air is raised to 70 degrees. In the installation shown at the right an additional humidifier has been installed in the top of the casing. This will moisten the air still more, and is particularly desirable in climates where the winters are severe.

In this installation an automatic heater is connected to the boiler to supply domestic hot water. Since the burner in the heater operates only when the furnace is not in use, this hook-up combines the economy of a furnace coil with the convenience of an automatic system.

The cost of a complete installation is much less than you would expect, especially when the materials are purchased from Ward's by mail. Buy on Easy Payments if you wish, See Page 4.



WARD'S Windsor PIPELESS FURNACE

A PIPELESS furnace combines the instant heat and good ventilation of a pipe system with extreme simplicity and economy. It is particularly suited for a small home with large, open doorways between the rooms.

A pipeless furnace operates on the same principle of ascending warm air as a pipe furnace, with this difference: circulation to and from one centrally located register is used to heat the entire home.

The Simplest of All to Install

A pipeless furnace has the same efficient heater used in a pipe furnace, but is surrounded by a double casing. This casing is so arranged that heated air from the stove can rise through the register inside of the ring, while cold air from the home can descend to the bottom of the casing (and thence up past the stove to be heated) through the openings in the register outside of the ring. If you study the arrows in the installation shown here, you will see that the warm air rises and is carried all through the house. As it cools it will settle to the floor and down through the outside portion of the register where it is again heated and circulated through the home.

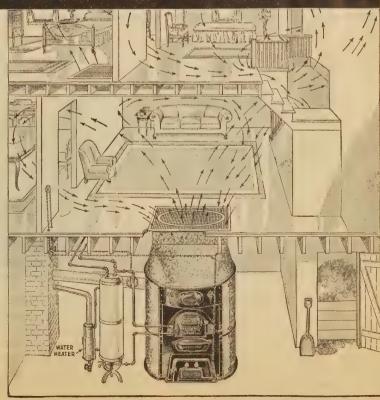
Has All the Famous Windsor Features

A Windsor Pipeless Furnace is built of exactly the same high quality materials as the Windsor Pipe Furnace of corresponding quality. As a matter of fact, the furnace proper, or heater, is exactly the same in both.

Careful attention has been given to all details of construction, assuring gas-tight joints which will prevent dust or gas from escaping into the circulating air.

Either system, when installed as described in our instruction books, will give an abundance of clean, healthful heat. The difference in cost lies only in the fact that a pipe furnace is equipped with pipes leading to each room.

In this installation an insulated range boiler has been connected to the furnace and equipped with an auxiliary heater which may burn either oil or gas. This arrangement enables you to have plenty of hot water both in and out of the furnace heating season.



SAVE 20% TO 40% BY INSTALLING



Our Simple Instruction Book Illustrates and Describes Every Step

With every Windsor Pipe or Pipeless Furnace we furnish a complete, but simple, instruction book which describes and illustrates the complete installation, step by step. With the aid of this book any handy man can install a Windsor Furnace in surprisingly little time.

Every Windsor Hot Water, Vapor, or Steam system is

accompanied by instructions for assembling the boiler, and complete plans of the heating system as installed in your home. These plans show the exact location of every section of pipe, every radiator, every fitting. To make it still easier, we cut and thread all 2-inch or larger pipe, shipping it ready for installation.

Ward's Windsor HOT WATER, VAPOR or STEAM



Set Up the Boiler

The detailed instructions with your Windsor boiler tell exactly how to set it up. Briefly, the job consists of assembling the sections, sealing all joints with the asbestos cement we furnish, and hanging the doors and fittings in place. All parts are so accurately fitted that you will have no trouble setting it up.



Spot the Radiators

Set the radiators in position where they are to be used, and mark spots for drilling beneath the valves. Then drill holes in Second floor first. Drop a plumb bob through hole in second floor and mark spot on first floor, so holes for pipe will be in line. Now drill holes in first floor, and you are ready to install the pipes.



(3) Install and Connect Radiators

The radiators are connected to pipes leading to the mains in the basement. The exact size of pipe to use and all details of connection are clearly shown on the blue prints we supply with each installation. The radiators are equipped with fittings that make connection easy. All necessary unions are furnished.



Copper Radiators

Copper radiators in cabinet convectors give more efficient and uniform heat from steam boilers than any other type of radiation. In new installations, where a home is built to conform with the heating system specifications, they may be concealed in wall recesses as shown For installation in homes already built, we supply attractive floor cabinets which take much less space than other radiators.



Connect Mains to Boiler

All mains for your installation are cut to exactly the right length and threaded. The blue prints show exactly where each part should be installed, and give complete directions to make the installation simple and easy for you. In the above picture the boy is connecting an automatic water heater to the boiler so that the home will be supplied with hot water whether or not the boiler is in use.



Put On the Insulation

After the system is installed and connected, the boiler and mains should be insulated to prevent the loss of heat to the basement. Windsor square boilers are equipped with jackets which hold the insulation in place. Windsor Round Boilers should be insulated with asbestos compound. Pipes are easy to insulate with the cut lengths of air cell asbestos insulation shown on Page 37.

YOUR OWN HEATING SYSTEM . . .

Ward's Windsor PIPE FURNACE



Set Up the Furnace

The furnace body is assembled in regular, logical steps, each one of which is fully described and illustrated in the instruction book you receive with the furnace.

The castings in cast iron furnaces are ground to fit perfectly. Each joint is made gas- and dust-tight by sealing with the asbestos cement we furnish with each furnace. This insures clean air when furnace is in operation.



Install Wall Pipes

After the furnace body is assembled the casing is attached. All of these steps are clearly explained in the instruction book. When the casing is in place you are ready to install the wall pipes and registers.

The wall pipes are flat so they will afit into the partitions of your home, and are equipped with attachments at the ends so you can easily install the registers and connect the pipes from the furnace.



Cut Bonnet for Pipes

After the wall pipes are in place with elbows attached to the lower ends, set bonnet on the casing and mark points where pipes are to connect. With a pair of dividers mark a circle just large enough for the collars.

Then remove bonnet from furnace, and cut out holes for collars with a pair of tin snips. You can now insert the collars in openings, and flange the ends on the inside so the joints will be tight. This is important because tight joints will insure rapid circulation and prevent waste of heat.



Connect Pipes

The instruction book tells you how to replace bonnet on furnace and tighten it so it fits perfectly. When this is done you are ready to connect the pipes. Install these straight as possible, because each turn or bend tends to retard circulation.

After all pipes are installed they should be insulated to prevent waste of heat. We supply insulating material, at slight additional charge.

The furnace is now ready for use, and will keep your home warm and comfortable for many years to come.

Ward's Windsor PIPELESS FURNACE



Locate Register

The register of a pipeless furnace should be located as near the center of the house as possible. In this way there will be more uniform distribution of heat throughout the entire house.

Proper location is very important to insure best results. Select a spot that will be near to the doorways connecting the various rooms, but not in front of a fireplace having an open flue. Place the register on the floor in the spot you have selected and mark two diagonally opposite corners by driving a long nail through the floor at each corner.



② Spot Furnace Location

Go to the basement and locate the two nails you drove through the floor. If necessary, change the location of the register enough to avoid cutting more joists than absolutely necessary. If you change the location, drive nails through the floor in the new spot.

Hang a plumb bob on each nail. Then place the outer hood, with the square top, so its corners are under the two plumb bobs. Draw a circle on the floor around the edge of the hood. This will give the location of the furnace, so you can determine in what direction it should face.



Set Up the Furnace

After the position of the furnace has been definitely decided, cut the floor and install the register.

Then proceed to assemble the furnace body. In assembling, the base ring is first set on the foundation, after which each succeeding section is added, with a liberal quantity of asbestos cement between each section.

If you have a steel furnace there is nothing to the assembly but hanging and bolting the radiator and doors to the furnace body, as described in the instructions you receive.



(4) Put On the Casing

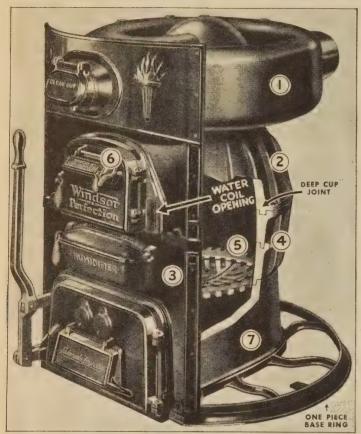
Windsor Pipeless Furnaces are equipped with triple casings to insure rapid circulation of air through them, and hence through the rooms above.

The casing sections are cut to proper length for assembly on the furnace. Starting from the inside, you build the casings, section by section, until all are in place. Then the inner and outer throats are connected from top of casing to the register, all connections tightened, and the job is finished.

The furnace is now ready to do a real job of heating your home.

"SHOW EM THE INSIDE" said one of our engineers

"Then they'll know why Windsor PERFECTION HAS GREATER HEATING CAPACITY"



Size for Size—
the Windsor Will Heat More Rooms

And here's the most important news of all. According to the Standard Code (the yardstick of the warm air heating industry)... the heating capacity of the Windsor Perfection is so much greater than most any other make that, for example, our 20-inch firepot size will heat a home that would ordinarily require a 22-inch firepot. And that's true in all four of the most popular sizes. There are a lot of other features too—particularly the castings. We just wish you could feel their thickness and weight. They're far heavier and thicker than most; that's mighty important because extra weight and thicker

SEE FOR YOURSELF HOW THE

For any fair comparison of furnaces the two most important features to consider are the Actual Weight and Furnace Capacity rated in accordance with the Standard Code, the official heating guide of the Warm Air Heating industry. Extra weight and thickness increase the life of the furnace.

Square Inch Furnace Ratings

Size	Ward's	Fi	Five Other Leading Furnaces						
Fire Pot	Windsor	A	В	C	D	E			
18 inch	360	322		341	280	320			
20 inch	445	402	405	420	360	401			
22 inch	537	498	492	502	480	478			
24 inch	643	582	578	591	590	552			
26 inch	698	695	689	694		653			
28 inch	760		794	768		762			

ness mean years added to the life of the furnace. The castings are smooth too... When you run your hand down the inside you'll notice how smooth it feels and how tight the deep cup joints fit... no gas is going to escape through them and contaminate the air you breathe. The feed door is oversize to permit easy firing. There are two water coil openings so you can connect your hot water heater on either side without using a lot of extra

stead of inside.

Windsor FURNACE EXCELS

pipe. The built-in humidifier is higher in the back

so that the overflow spills outside the furnace in-

The Furnace Capacity is the total square inches of warm air pipe area that the furnace will serve adequately. Here's a comparison between the Windsor and five other widely known furnaces. In the charts below we have named them A, B, C, D, E. Results show the superiority of the Windsor.

Furnace Weights (Pounds)

Size	Ward's	Five Other Leading Furnaces						
	Windsor	A	В	С	D	E		
18 inch	960	900		861	769	875		
20 inch	1115	1020	1015	977	1050	1025		
22 inch	1325	1170	1150	1093	1168	1145		
24 inch	1540	1325	1310	1208	1314	1273		
26 inch	1765	1600	1585	1385	1579	1482		
28 inch	1945		1770	!				

Look at that husky fire-box; that massive, 1-piece radiator, the extra weight, thickness and other features that will stand up under years of heavy firing.

1 ONE-PIECE RADIATOR

We've made it of massive size...extra large and very deep...to expose the greatest possible heating surface to the air. Being of cast iron it holds the heat for a long time. Its one-piece construction prevents any gases escaping and becoming mixed with the air you breathe.

(2) COMBUSTION CHAMBER

Here's the "heart" of the furnace and the Windsor's massive combustion Chamber provides abundant space in which the fuel gases may be completely burned and the heat units used to heat your home—instead of being wasted in the form of soot and smoke.

(3) SLIP-ON FRONT

It's as easy as rolling off a log to slip this front into place. No bolts or cement needed...yet no dust from the cellar...no smoke nor gas from the fire can get into the warm air pipes at any time. It's movable too, to eliminate cracking caused by heat expansion.

(4) TWO-PIECE FIREPOT

The Windsor's fire pot is heavily ribbed to add strength and radiating surface. Smooth inside to promote clean fire and easy elimination of ashes. It provides an extra large heating surface because there is only two inches difference in the diameters of the top and bottom.

(5) NEW DUPLEX GRATES

They move smoothly . . . the outer ring, operated by the upright shaker handle, revolves on roller bearings. It sifts the fine ashes out of the fuel bed while clinkers gravitate into the center "basket" where they can be dumped by the two center bars.

6 SMOKE CONSUMER

It acts somewhat like a set of "lungs" for the Windsor. . . it actually "breathes" a blast of fresh air over the hot coals and causes a secondary combustion of the volatile gases. This action reduces smoke, increases heating efficiency and burns the gases that otherwise would be wasted.

7 LARGE ASHPIT

Removing ashes isn't much of a job anymore if you own a Windsor. The one-piece ashpit extends through the front and has a large door for the easy removal of ashes. Surface ground door and frame are fitted paper tight to eliminate excessive drafts. It's extra deep, too.

(8) WAIST HIGH SHAKER

Throw away your gas mask when you shake the Windsor. No bother, no mess, no dust...you don't even open the door. Remember the old type? You opened the door, knelt down, used an awkward hand crank and held your breath or almost choked from the dust.

9 ONE-PIECE BASE

Like the Rock of Gibraltar, this single massive casting, combining ash pit bottom and base ring, forms a firm solid foundation without joints and provides a permanent base. The ash pit bottom slopes up at the front and permits watering the ashes.

SAFETY CLEANOUT

The radiator casting extends through the front and forms a gas and dust-tight joint. A gravity door at cleanout opening eliminates the necessity of removing the bolts found on most types of furnaces. And the wide opening makes cleaning easy.

Windsor HEATING GUARANTEE

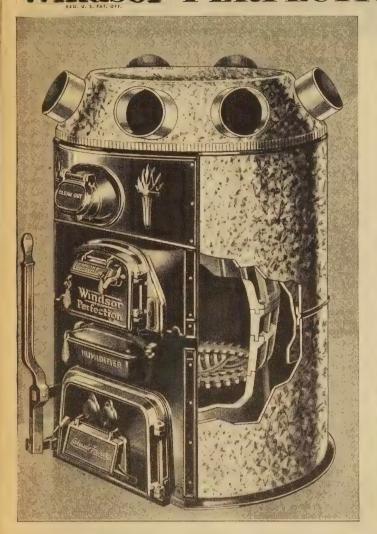
WE GUARANTEE the Windsor Perfection Furnace sold by us to be free from defects in material and workmanship, and to give satisfactory service when installed and used according to our instructions.

We further guarantee, upon request and without charge, to make adjustments and repairs to said system which become necessary, or replace any parts found defective in manufacture, during the first year after purchase is made, where said adjustments, repairs, or replacements are required through any fault of Montgomery Ward & Co.

MONTGOMERY WARD & CO.

THIS FURNACE PLAYS NO FAVORITES

Every room gets an abundance of heat with Ward's Windsor PERFECTION PIPE FURNACE





Impartial comparison of the Windsor Perfection Pipe Furnace with other well-known makes revealed this startling fact: Our furnace had a greater heating capacity-Our furnace was heavier-better able to stand hard use. And finally, our furnace was lower priced!

Heat can't escape from a Windsor Perfection. A double galvanized casing seals it inside, forces a strong warm current into every room in the house. The short inner-casing allows plenty of room for clean, fresh air to pour in from cold air ducts. Before it is heated and swept into the rooms, it absorbs healthful moisture from the built in water pan.

Healthful Moist Heat

The Windsor Perfection Pipe furnace is made in five sizes to heat homes or other buildings with 4 to 11 rooms. Notice the cut away view on the opposite page. Turn to page 23 and read bow an efficient warm air system operates. Then decide to bring your family the healthful comfort of clean, abundant moist heat. Five dollars down and a few dollars a month is a small price to pay for cold-weather comfort. See Page 4.

Complete with casings, bonnet without collars, cement, check draft, regulating dial with chain, pulleys, etc. and instructions for installing and operating. Top or bonnet furnished without collars or holes for pipes, so that you can arrange for pipe connections to fit your needs. Water coils, smokepipe, elbows, dampers and collars are extra equipment, they're shown on pages 33, 38 and 39.

Whether You Have 4 Rooms or 11—Here's a Windsor Furnace to Meet Your Needs

Article Number	Diam. Fire- pot Inches	Depth Fire- pot Inches	Size (Diam. Inches	Size Feed Door Inches	Diam, Smoke Pipe Inches	No. of	Capacity Pipe Area Sq. In.	Approx. Ship. Wt. Pounds	Cash Price	Easy Payment Price
181 H 2418	18	10	63	38	11½×12	8	4 to 6	360	960	\$44.95	
181 H 2420	20	10½	65	42	11½x14	8	5 to · 7	445	1115	53.65	59.15
181 H 2422	22	11	67	46	12 x14¾	9	6 to 8	539	1325	64.45	70.95
181 H 2424	24	12	68	50	12 x1434	9	7 to 9	645	1540	74.50	82.00
181 H 2426	26	12	69	54	12 x1434	9	8 to 10	698	1765	87.50	96.00

Extra Large Size Windsor Pipe Furnace

Same construction as above except standard bolted front in place of slip-on front and bolted base in place of one piece base.

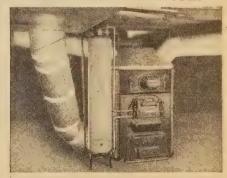
69 59 11½x16½ 10 9 to 11 746 1900 \$104.00 \$114.50

All above Furnaces shipped promptly from Stock in Chicago, or Warehouse near Birmingham, Ala., whichever is nearer you, to save time and freight. Estimated Freight Charges on Page 3.

We Furnish Blue Prints-Floor Plans-Everything So You Can Set It Up Yourself

Our Engineering and Information Department will furnish you complete information for making your Windsor installation. To estimate your heating requirements we must figure the space to be heated and the loss of heat from the building. Therefore please make a pencil sketch of the basement and each floor. It doesn't have to be an elaborate drawing—you can do it easily yourself—See the sample sketch on Page 28. Send us the sketch along

with the following information: (1) Dimensions of each room. (2) Type of construction (brick, frame, etc.). (3) If brick or concrete, give wall thickness. (4) Size and location of doors and windows. (5) Size and location of basement beams and direction of joists. (6) Size and location of chimney. (7) Preferred location of furnace and warm air registers. (8) Direction building faces. (9) Which sides your building is protected by trees or other buildings.

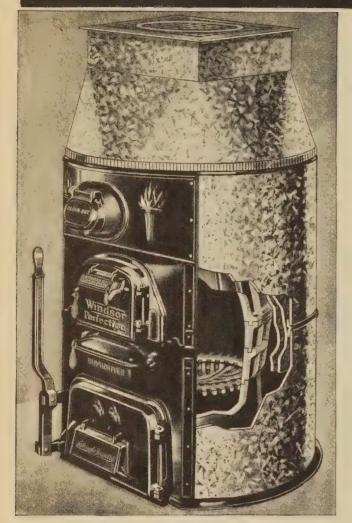


· Here is an actual photograph of a Windsor Perfection Furnace as installed in the 2-story house of Mr. Peter Ahnen at 4922 Byron St., Chicago, Ill. The furnace was put in shortly before a recent spell of zero weather and Mr. Ahnen reports that it delivered "plenty of heat," keeping the entire house comfortable.

And if you prefer a PIPELESS FURNACE . . . here is a

Windsor PERFECTION

with all the features shown on page 26



\$600 DOWN See Page 4

One of the most economical of all heating plants. The first cost is the last. No pipes to buy nor expensive labor costs. Install the unit in your basement-make an opening in the floor above for the warm air register. Regulating dial upstairs makes it easy to operate check damper and draft.

Has All the Famous Windsor Features

This is the same Windsor Perfection shown on page 26. Warm-air register and a triple casing of heavily galvanized sheet-steel converts it into a Windsor Perfection Pipeless Furnace. Cold air from your house descends through the outer casing, moves around the shorter inner casing where it is heated. Then it surges upward in a blast of warm air through the central register and circulates freely among the rooms. An additional register can be installed in the floor of a 2-story house to better conduct heat beyond the first floor.

Here's How to Get Best Results

To get best results from a pipeless furnace your house should be constructed to permit free circulation of air. It should be compactly arranged; rooms should have large doorways. Send us a description or a rough sketch of your room arrangement and we will tell you if this type of heating is suited to your home. See Page 23 for further information on the Pipeless furnace.

Made in four sizes to heat homes containing 4 to 11 rooms. Complete with floor register, cement, check damper, regulating dial. 25 feet of chain, pulleys, poker, shaker handle and directions for installing and operating.



Send Us Your Floor Plans



Anybody can make a simple plan like this. Just be sure to state the exact width, and length of each room, and the other information requested on page 27. From your drawing we will make up blue prints and specify the positions of the furnace, pipes and registers. Our plans will be made solely for your home... because your heating problem is different from that of any other home and requires individual attention. The careful attention we exercise in making these plans is one of the reasons why we've never had to refund a dollar due to unsatisfactory service of the Windsor.

Here Are the Specifications that Prove Windsor Value

Article Number	Diam. Fire- pot Inches	Depth Fire- pot Inches	Size Floor Register Inches	Size Feed Door Inches	Diam. Smoke Pipe Inches	Heating Capacity in Cubic Feet	Heating Capacity Number of Rooms	Approx. Snip. Wt. Pounds	Cash Price	Easy Payment Price
181 H 2318	18	10	28x28	11½ x12	8	5400	4 to 6	1070	\$59.50	\$65.00
181 H 2320	20	10½	30x30	11½x14	8	7000	5 to 7	1240	71.50	79.00
181 H 2322	22	11	34x34	12 x14¾	9	8000	6 to 8	1490	84.50	93.00
181 H 2324	24	12	36x36	12 x14¾	9	10500	7 to 9	1675	96.50	106.00
181 H 2326	26	12	38x38	12 ×14¾	9	11250	8 to 10	1750	113.50	125.00

Extra Large Windsor Perfection Pipeless Furnace

Same construction as above except it has standard bolted front in place of slip-on front and bolted base instead

181 H 1028 28 12 42x42 11½x16½ 10 12000 9 to 11 2100 \$129.75 \$142.25

Above furnaces Shipped from Stock in Chicago, or Warehouse near Birmingham, Ala., whichever is nearest you. For Estimated Freight Charges see Page 3.

You Can Install a Windsor Pipeless Furnace Yourself— We Send You Complete Instructions

THINK OF IT ... a full-sized Furnace for about what you would have to pay for a good stove

Windsor STANDARD PIPE FURNACE

The Windsor Standard is second only to our fine Windsor Perfection. It's a mighty fine job throughout, in fact it's made so well that many would call it their very best grade. The workmanship is excellent, the cast iron and other materials are first quality and the trouble-free service it has given over a period of years is the best testimonial any furnace can possibly have. And the features of the Standard shown below tell you as well as any Heating Engineer could why this is an outstanding value. From what you yourself know about furnaces, even if your knowledge has been limited to just what others have told you, you'll recognize features here that are unmistakable marks of quality. Read about them. Complete with heavy galvanized casings, cement, bonnet—less collars, check draft, regulating dial, 25 feet of chain, pulleys, poker, shaker handle, fuel economizer and installation instructions. For your convenience the bonnet or top is shipped without collar or holes for pipe—you can locate the holes to suit your particular job. The smokepipe, elbows, wall pipe and dampers are priced on pages 38 and 39, the watercoils on page 33.

Article Number	Diam. Fire- pot Inches	Depth Fire- pet Inches	Size C	Diam.	Size Feed Door Inches	Diam. Smoke Pipe Inches	No. of	Pipe Area	Approx. Ship. Wt. Pounds	Cash Price	Easy Pay- ment Price
181 H 1418 181 H 1420 181 H 1422 181 H 1424	18 20 22	10½ 11 12 12¾	56½ 60½ 62½ 64½	40	9 x11½ 10½x12½ 11 x13 11 x13	7	4 to 5 5 to 6 6 to 7 7 to 8	322 377 450 549		\$37.95 45.50 54.75 63.50	\$41.95 50.50 60.25 70.00

Above furnaces Shipped Not Prepaid from Stock in Chicago, Baltimore or Albany, N. Y., or factory near Birmingham, Ala., whichever is nearestyou. Estimated Freight Charges on Page 3.

Look Over These Quality Features

ONE-PIECE RADIATOR. Is unusually deep and provides highest possible heating efficiency and lower fuel cost.

COMBUSTION CHAMBER. The dome shape and corrugations increase heating surface. Large, heavy chamber transmits the maximum heat units to radiator.

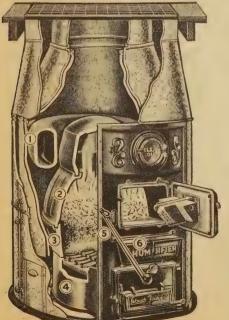
ONE-PIECE FIREPOT. Massive construction. Deep corrugations increase heating surface and add to strength and durability. Extra heavy triangular grates made to last for years.

LARGE HIGH ASHPIT for easy removal of ashes. Heavier and stronger than used on most furnaces selling for more.

BOLT-ON FRONT. Cement makes gas-proof and smoke-tight

LARGE HUMIDIFIER is easily accessible. It provides moisture to make the air in your home more healthful.





Windsor STANDARD PIPELESS

A simple, efficient heating plant that needs little space and is easy to install

\$500 DOWN BALANCE MONTHLY

Just the thing for the small compact home with means of circulation between rooms. It's easy to regulate and keeps your home cozy and cheerful—and does it at the lowest possible cost. In the first place the Standard doesn't cost much itself... and in the second place it's economical on fuel. It doesn't have a yawning mouth that constantly cries for more coal till it makes your coal bin look as bare as Old Mother Hubbard's cupboard. And no wonder—with all those quality features listed above (exactly the same as used in our Standard Pipe furnace) it's bound to

be a mighty efficient heating plant. It has a triple casing such as is used on the best pipeless furnaces. And if you follow the instructions you can install it as well as any expert. We furnish you with floor register, casings, cement, check draft, regulating dial with 25 feet of chain, pulleys, poker, shaker handle and instructions for installing and operating. Nothing more to buy. For basements up to 8 feet high. Not Prepaid. See Estimated Freight Charges on Page 3. For Easy Payments see Wards' Budget Plan on Page 4.

Article Number	Diam, Fire- pot In.	Depth Fire- pot In.	Size Floor Register Inches	Size Feed Door Inches	Diam. Smoke Pipe Inches	Heating Cap. in Cubic Feet	Heating Capacity Number of Rooms	Approx. Ship. Wt. Pounds	Cash Price	Easy Pay- ment Price
181 H 1018	18	10½	28x28	9 x11½	7	5000	4 to 5	960	\$50.75	\$56.25
181 H 1020	20	11	28x28	10½x12½	8	6000	5 to 6	1090	60.75	67.25
181 H 1022	22	12	30x30	11 x13	8	7000	6 to 7	1230	71.95	79.45
181 H 1024	24	12¾	30x36	11 x13	8	8000	7 to 8	1410	84.95	93.45

Above furnaces Shipped Not Prepaid from Stock in Chicago, Baltimore or Albany, N. Y., or factory near Birmingham, Alabama.

BUILT LIKE A BATTLESHIP

Gas-tight, boiler plate steel body. Extra heavy. Cold riveted, electrically welded.

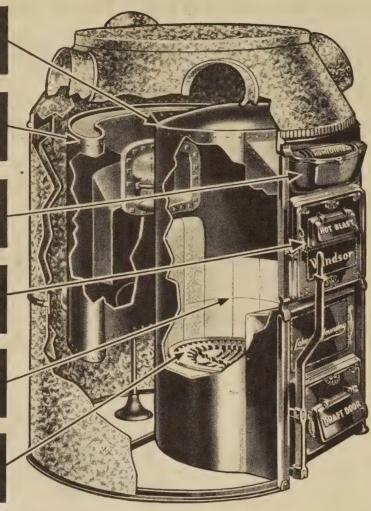
Extra heavy, 12-gauge steel radiator, cold riveted, electrically welded.

Large capacity Humidifier, high up for efficient evaporation.

Double Feed Doors. Extra Large. Take extra big blacks of wood or coal.

Firepot lined with Cupala Fire Brick to withstand tremendous heat. Third row in back protects body.

Easily operated Duplex Grates. For all kinds of solid domestic fuel.



Modern—Efficient—Economical

You'll be impressed with the outstanding qualities of this Windsor Steel Furnace. The entire inside—shape, materials and construction—is radically different from ordinary types of furnaces. It represents new design at almost every point in the construction. Note how the combustion chamber and radiator are riveted and welded into one solid unit as sturdy as a battleship. It's rigid and strong—built for many years of service and heating comfort. The seams are so tight no fumes, gases, soot or dust can escape into the house and become mixed with the air you breathe.

Notice also the heavy Cupola fire brick lining in the firepot section of the drum. This brick is two inches thick, of the finest quality obtainable; there's a third row in the back to protect the furnace body from becoming overheated. And here's an important feature: you can use any kind of fuel with this All-Steel Windsor Furnace.

THERE'S A SIZE WINDSOR TO HEAT from 5 to 13 ROOMS

The prices quoted below include the turnace, complete with heavy galvanized casings, bonnet without collars, cement, check draft, regulating dial with 25-foot chain, pulleys, poker, shaker handle and a complete instruction booklet for installing. Water coils, smokepipe, elbows,

pipe and dampers are priced on Pages 38 and 39. For Easy Payments see Page 4. Shipped from Stock in Chicago or Warehouse in Southwestern Ohio, whichever is nearer you. For Estimated Freight Charges see Furnaces on Page 3.

Article Number	Diam. Drum Inches	Diam. Grate	Depth Firepot Inches	Outside Casing Inches	Feed Door Inches	Smoke Pipe Inches	Capacity Pipe Area, Sq. Inches	Heating Capacity Number of Rooms		Cash Price	Easy Payment Price
281 H 1480	20	16	14	48	14x14 in.	9 in.	400	4 to 5	1010	\$69.50	
281 H 1482	22	18	14	50	14x14 in.	9 in.	475	5 to 7	1070	79.50	87.00
281 H 1484	24	20	14	52	14x14 in.	9 in.	555	6 to 8	1135	89.50	
281 H 1486	26	22	14	54	14x14 in.	9 in.	635	7 to 9	1180	99.75	109.25
281 H 1490	30	26	14	58	14x14 in.	9 in.	865	9 to 11	1420	119.50	131.00
281 H 1494	34	30	14	62	14x14 in.	9 in.	995	11 to 13	1545	135.00	148.50

Boiler plate Steel, riveted and welded to prevent soot, dust and fumes from escaping into your home. Ideal for Gas and Oil Burners

Windsor
STEEL FURNACE

\$6950 Cash Price

ONLY \$6 DOWN and \$7 a Month See Budget Plan, Page 4.

Rated According to Standard Heating Code

The Standard Code, a set of rules to govern the proper installation of Warm Air Heating Systems, was developed to protect the public against wrong installations. It is approved and issued by authority of: National Warm Air Heating and Ventilating Association, Inc.; The American Society of Heating and Ventilating Engineers; and National Association of Sheet Metal Contractors. It is America's highest Authority on warm air heating.

The ratings given at the left are based on the Standard Code Ratings. This means that the proper size furnace positively will heat your home if installed according to the Standard Code specifications. Note also the many other superiorities listed above at the left. All of them combined make the steel Windsor the best that modern engineering and manufacturing skill can produce. And to be sure we overlooked nothing . . . the design is especially adapted for efficient operation with either gas or oil burners.

No More Coal Bin . . No More Shoveling!

-With a Windsor

AUTOMATIC OIL-BURNING FURNACE

Your Basement Becomes

A Livable Part of Your Home



The newest type of heating plant for homes up to 10 rooms. A thermostat control on your living room wall, a heating unit in the basement, and you say Goodbye forever to basement drudgery. Powered to give you fast, clean, luxurious automatic heating service... yet it actually saves you 20% in fuel costs over Oil Burners installed in coal furnaces.

New Principle! Extracts 35% More Heat from Fuel Windsor's design is a radical departure from ordinary warm air furnaces of today. Oil burner and furnace are designed as a unit (more efficient than any two-unit assembling job could possibly be). Designed to keep the hot gases in the furnace longer and thereby utilizing 35% more heat units from the fuel than coal burning furnaces

Here's How Windsor Works to Cut Oil Bills 20%

Cold air (indicated by black arrows in picture above) enters the furnace where the burnt gases (white arrows) have settled and are ready to pass out the chimney. This air reaches its highest temperature at the top of the furnace where fire and burnt gases are also hottest. As heat is extracted from the burning gases they settle slowly down to the bottom before they ascend the discharge flue and out the chimney. The remarkable efficiency of the Windsor is accomplished through common sense design; large combustion space... properly proportioned heating surfaces and control of fire and gas travel through the thermostatic damper (shown by the dotted lines in illustration above) which automatically closes when the flue and damper are heated to 220 degrees, forcing the hot burning gases to settle slowly to the bottom of the furnace before they are released.

Fully Automatic Thermostat Control

Merely set the thermostat in your living quarters to the temperature you prefer, the Windsor will automatically maintain that temperature. Never too hot, never too cold. Windsor will banish coal bins, ash barrels and dust. And your basement can become a really useful livable part of your home.

Check THESE Windsor Features, Too

- 1. Burns cheap No. 3 fuel oil (28-32 gravity).
- 2. Combustion is completed in a refractory chamber and in complete suspension, which means no oil comes in contact with the heating surfaces until after combustion.
- The smaller the home, the less oil necessary to heat it.
- 4. Made of heavy gauge steel, no joints, rivets nor cement gaskets to in-
- 5. Welded into one complete gas-tight unit.
- 6. Galvanized double casing has insulated air space between.
- 7. Constructed so you can add the automatic humidifier below.

The Oil Burner is the famous Windsor fully described on Page 35.

Simple to Install—Instructions Furnished

Set the furnace body which is in one unit—attach casings and bonnet—fasten the oil burner to the burner brackets—put up smoke pipe and warm air pipes and connect oil burner to oil storage tank. Bonnet shipped without pipe, collars or holes for pipe—you can arrange for pipe connections to suit your needs.

Furnace Shipped Not Prepaid from Factory in Chicago. Oil burner, with controls Shipped Not Prepaid from Rockford, Ill. Estimated Freight Charges under "Furnaces" on Page 3.

281 H 8110—Windsor Steel Oil Burning Warm Air Furnace complete with Oil Burner with controls but less tanks. Ship. wt. 685 lbs. Cash Price. \$259.00 Easy Payment Price, \$27.50 Down, \$16.00 Monthly. 284.00

Oil Storage Tanks. Shipped Not Prepaid from Factory in Chicago

281 H 7502—Standard Basement Storage Tank, complete with oil gauge and stand, Capacity 275 gal. Length 66 in.; width 441/4 in.; depth 27 in Ship. wt. 310 lbs.\$21.95 281 H 7501—Underwriters' Labeled Underground Storage Tank. Capacity 550 gallons. Length 72 inches; diameter 48 inches. Ship. wt. 800 lbs. \$42.50 281 H 7501—Underwriters' Labeled Underground Storage Tank. 1000-gallon size. Length 72 inches; diameter 64 inches. Shipping weight 1200 pounds. \$57.50

Banish Daytime Drowsiness—Install An



It'll make the air in your home healthful, exhilarating and bracing . . . because it provides an adequate proportion of moisture. Doctors and scientists agree that a temperature of 70 degrees with 40 to 50 percent humidity helps prevent head colds, sore throats and other similar ailments. Moreover moist air eliminates cracking of walls, spreading of windows and floors and damage to furniture thru drying out.

It slips into the top of your furnace casing. The flow of water is thermostatically controlled so that the hotter the furnace, the more moisture is provided. The water is distributed to the pan by the drip method . . . and may be adjusted to any desired amount. All parts are of brass and aluminum except the cast iron pan. Instructions for installing included. Will fit any pipe furnace.

481 H 7937-Mailable but Not Prepaid. Include postage with your order. Shipping weight 27 pounds....

Say goodbye forever to Basement Drudgery install a Windsor GAS BURNER



in your heating plant

for WARM AIR-STEAM-HOT WATER

Enjoy the cleanest, most trouble-free and sanitary type of home heating equipment in use today. And it's as easy to operate as an ordinary gas range . . . merely turn it on or off with the shut-off valve as you desire.

And it's the easiest thing in the world to install. The cast iron burner is horseshoe shaped and can be inserted easily through even very small furnace or boiler doors. It surrounds the fire brick radiants which are so shaped they direct the flames against the walls of the firepot and combustion chamber and utilize the heat units to warm your home. These radiants are supported by a cast iron ring which is equipped with special lugs to hold the 8 separate radiants securely and eliminate any chance of being improperly spaced. The entire assembly is supported on two half circle, over-lapping baffle plates placed on top of the grates . . . it isn't necessary to remove the grates or even make any changes in your heating plant. This one size can be adjusted to heat a home as large as 5 rooms. Burns all types of gas too . . . natural, mixed or manufactured.

You can make it entirely automatic by installing the electric motorized valve and thermostat equipment priced below.

Modern — Clean — Economical

Its low cost is a mighty important factor too and you can use Ward's Budget Plan of Easy Payments if you wish. . . see Page 4. Now everyone can afford the many advantages of gas heat—advantages that formerly belonged in the luxury class. The burner is sent complete ready to install together with complete instructions for installation. See Page 43 for prices on gas pipe for attaching to gas main. The price for the electric gas valve and thermostat is given below. The thermostat and motorized valve operate on low voltage current so that the wiring may be done with ordinary bell wire. A transformer is furnished reducing voltage from 110 volts to 20 volts. State kind of gas used.

281 H 8107—Electric Gas Valve and Bronze finish Room Thermostat only. Shipping weight 12 pounds. Mailable but Not Prepaid. Include Postage. Shipped from Factory in Southeastern Wisconsin.......\$29.45

Gas Conversion Burner for Manual control without thermostat and electric motorized valve. Sheet metal Baffle plate included. For cast iron or steel furnaces with 20-in, or 22-in, dia. firepots—also for steam or hot water boilers with 18-in, or 20-in, dia. fire boxes. Shipping weight 60 pounds, Not Mailable. Shipped Not Prepaid from Factory in Northern Ohio. For Estimated Freight Charges see "Gas and Oil Burners" on Page 3.

WAKE UP IN A WARM HOUSE LET A THERMOSTAT DO YOUR





All Electric Heat Control with General Electric **Telechron** Switching Clock

The electric Telechron clock automatically adjusts the temperature, For example: Set the daytime dial at 5 A.M. (earlier or later)...and promptly on the dot it switches the day thermostat into operation which closes the dampers, opens the drafts and heats your home all day long at the temperature you set on the thermostat. Set the night dial at 11 P.M. or any hour you desire and from then until morning your room temperature is dropped to the temperature for which you set the night thermostat.

You never need touch it or warry about it after it is installed and

you set the night thermostat.

You never need touch it or worry about it after it is installed and you have set the day and night dials, it will automatically adjust from day to night temperature and back again. Complete with General Electric Telechron clock with automatic switching device, Night and Day thermostat, damper motor, transformer, chains, hooks, etc., as described at right, together with instructions for installing. For 110 volt 50 cycle current only. Shipped from Stock. Shipping weight 22 pounds.

481 H 7802

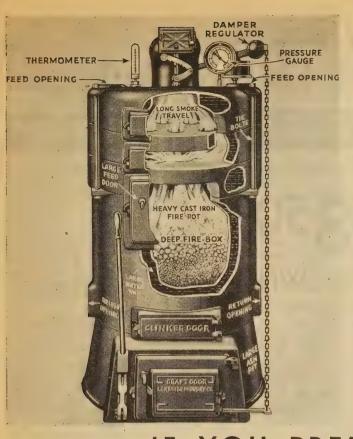


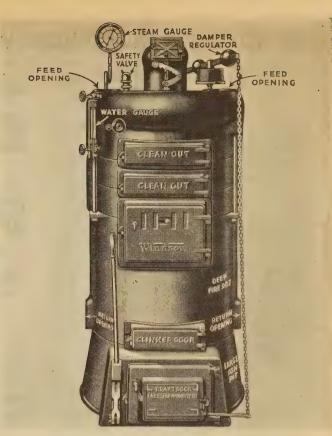


No more overheating! Ward's Electric Heat Control regulates the temperature in your home to any degree you desire, day and night, by automatically closing the draft and opening the check door of your boiler or furnace when necessary. Saves the inconvenience of countless trips to basement. Saves fuel and maintains an even healthful temperature at all times.

Wiring is simple. You can install it yourself. Complete unit includes thermostat, damper motor, with built-in transformer and all necessary chains, hooks, etc., with complete instructions for installing. Transformer reduces to low voltage from 110 volt 60 cycle current only. Mailable. Shipping weight 13 pounds.

481 H 7801—Complete Outfit.....\$14.95





YOU PREFER A ROUND BOILER does a Fine Heating Job Ward's

Round Windsor for Hot Water

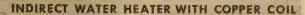
Easy Payment Price \$5.00 Down \$5.50 Monthly

Heat. . . and plenty of it . . . quickly! That's what you get with either a Windsor Round Hot Water or Steam boiler. The fire travel is scientifically guided by means of staggered openings so that the heat units are absorbed by the water instead of passing up the chimney. The unusually deep firepot holds a large quantity of fuel, thereby maintaining the temperature for long periods of time. The sides of the firepot are smooth and tapered to prevent crusted fuel from hanging to sides and insuring a self-cleaning surface. You can burn all sizes of domestic fuels too . . . and a positive setting of the shaker allows the fire to be gently agitated or completely dumped. Any good Heating Engineer will tell you the other features shown above are the best you can possibly get anywhere. Boilers shipped in sections with complete instructions for installation. Both Hot Water and Steam Boilers include damper regulator, gauges, etc. as pictured above. In addition a shaker handle, wire flue brush and poker are furnished. May be purchased on Easy Payments—see Page 4. Shipped Not Prepaid from Warehouse in Chicago or Western Pennsylvania, whichever is nearer you. Estimated Freight Charges listed under "Boilers, Cast Iron Heating" on Page 3. Round Windsor for Steam

Easy Payment Price \$5.00 Down \$5.50 Monthly

Important!—Actual load figures are the Net Load Recommendations as published by the Heating and Piping Contractors' Nat. Assn.

		100					HOT WATER BOILERS				STEAM BOILERS				
Size of Grate	Sections Above Firepot	Grate Area Sq. Ft.	Height Feet	Flue Size, In.	Size of Smoke Pipe, In.	Inlets Outlets No. and Size, In.	Rated Capacity Sq. Ft.	Actual Radiation Load Sq. Ft.	Ship. Wt. Pounds (May vary)	Article Number 181 H 7734	Height Water Line Inches	Rated Capacity Sq. Ft.	Actual Radiation Load Sq. Ft.	Ship. Wt. Pounds (May vary)	Article Number 181 H 7741
17 in. Diam.	3	1.52 1.52	30 30	8x8 8x8	7 7	2 ea. 2½ 2 ea. 2½	600 675	285 320	625 730	\$ 47.00 50.60	41½ 46	350 400	175 195	725 830	\$ 49.50 54.75
20 in. Diam.	2 3	2.01	30 35	8x8 8x8	9	2 ea. 2½ 2 ea. 2½	850 925	455 495	750 850	51.50 57.75	45 50	500 550	275 300	850 950	56.70 62.25
23 in. Diam.	3	2.67 2.67	35 35	8x12 8x12	9	2 ea. 3 2 ea. 3	1300 1375	620 675	910 1050	71.00 77.00	45 50	775 825	375 410	1050 1060	74.25 82.00
26 in. Diam.	2 3	3.62 3.62	35 40	8x12 8x12	10 10	2 ea. 3 2 ea. 3	1575 1700	785 865	1100 1250	82.50 90.75	45 50	950 1025	475 525	1210 1350	87.50 98.50
29 in. Diam.	2 3	4.35 4.35	35 40	12x12 12x12	10 10	2 ea. 4 2 ea. 4	1975 2150	990 1115	1300 1500	99.00 110.00	46 51	1200 1300	600 675	1500 1680	108.00 119.00



Use your steam boiler to heat water. Heater is attached outside boiler below water line. Heavy copper coil with brass unions. No rust. Clean water is assured. It is efficient, dependable and economical. Not Prepaid.

Article Number	For Tank Length		Conne	Boiler	Ship. Wt.	Price
481 H 7829 481 H 7830 481 H 7831 481 H 7832	30 gal. 40-52 gal. 66 gal.	9 in. 11 in. 13¾ in.	% in. % in. % in.	1 in. 1 in. 1 in.	16 lbs. 20 lbs. 28 lbs.	\$2.25 2.95 4.75



FIN TYPE COIL

85c For quick circulation. Has five tapped openings of ³/₄ in, to fit any boiler or warm air furnace requirements. Cast iron. Three plugs included to plug connections not used. Ship, wt. 8 lbs. Mailable but Not Prepaid. 81 H 8169—Each......85c

HOT WATER COIL



95c

Inexpensive. Fits Windsor and other furnaces. Connects to range boiler. Threaded for 3/4 inch fittings. State size of furnace. Ship. wt. 5 lbs. Mailable but Not Prepaid. 481 H 8167— Each......95c

The arrows show you why you get

quick heat with little coal

Windsor SQUARE BOILERS

For Hot Water, Steam or Vapor—Burns Coal or Oil

\$5850 Cash Less Jacket

\$500 DOWN

Balance Monthly See Page 4 Here you actually see how the scorching heat encircles every section . . . in fact, the Windsor construction with its long flue travel and large heating surface insures rapid and efficient absorption of heat from the fuel. The circulation of water in the waterways is exceedingly rapid. The flue arrangement and the great amount of space in the combustion chamber (between top of the fuel bed and crown sheet) allows an easy, unrestricted flow of the burning gases, which assures a proper and complete combustion rate and easy regulation.

There are many other advantages too . . . listed below . . . all of which combined meet the most exacting requirements of engineers, architects

and contractors. All factors considered . . . and at Ward's amazingly low price . . . it's a value hard to equal. In addition, we say, Use any Windsor for two years at our risk. If it fails to give you complete satisfaction return it within the time and we'll refund every cent you have paid, including transportation charges.

And These Features Tell You What You Cannot See

Heavy metal jacket finished in Cardinal Red with black enamel doors.

The insulation on four sides and top with heavy 1-inch asbestos; means a great saving in heat and fuel.

Heavy rocking type grates permit the burning of all domestic sizes of fuel.

Deep firepot permits firing sufficient fuel to insure long periods without attention. The large combustion chamber allows thorough mixing of gases and burning them into useful heat without excessive loss in the form of smoke and soot up the chimney.

Extra large ash pit insures long life of grates and ease of ash removal.

All feed and clean out doors are ground to fit preventing the leakage of cold air to flue way or escape of gases into the cellar. Design of water ways insures rapid

circulation throughout the boiler.

Sections easily assembled. Each boiler furnished with shaker handle, steel wire cleanout brush, poker equipment shown on illustrations and instructions for installing and operating. Overall height 58 inches, with 46-inch water line for steam boilers. 9-inch smoke collar.

ESSENTIAL DATA FOR BOTH STEAM AND WATER BOILERS

**** IMPORTANT** Actual Load figures are the Net Load Recommendations as published by the Heating and Piping Contractors' National Association.

	Windsor Square Hot Water Boiler—State Size												
Size of Boiler		Firepot Approx. Size Inches	Grate Area Sq. Ft.	Rated Capacity Sq. Ft.	Actual Load Sq. Ft.	Approx. Ship. Wt., Lbs.	Inlets and Outlets No. and Size, In.	181 H 7724 With Jacket	181 H 7739 Without Jacket				
17	5	17 by 17	2.00	950	480	1180	2 ea. 21/2	\$68.50	\$58.50				
17	6	17 by 21	2.50	1250	630	1360	2 ea. 21/2	79.00	68.00				
17	7	17 by 25	3.00	1550	780	1500	2 ea. 21/2	90.00	78.00				
17	8	17 by 29	3.50	1850	960	1645	3 ca. 21/2	101.00	88.00				
17	9	17 by 33	4.00	2150	1080	1820	3 ea. $21/2$	112.00	98.00				

	Windsor Square Steam Boiler—State Size													
Size of Boiler		Firepot Approx. Size Inches	Grate Area Sq. Ft.	Rated Capacity Sq. Ft.	Actual Load Sq. Ft.	Approx. Ship. Wt. Lbs.	Inlets and Outlets No. and Size, In.	181 H 7749 With Jacket	181 H 7744 Without Jacket					
17	5	17 by 17	2.00	575	290	1200	2 ea. 2½	\$68.50	\$58 50					
17	6	17 by 21	2.50	750	380	1375	2 ea. 2½	79.00	68.00					
17	7	17 by 25	3.00	925	470	1520	2 ea. 21/2	90.00	78.00					
17	8	17 by 29	3.50	1100	560	1665	3 ea. 21/2	101.00	88.00					
17	Q	17 by 33	4.00	1275	650	1840	3 ea 21/2	112.00	08.00					

Your Assurance of Quality

NOTE in the large picture above, the long travel of flame in the Windsor—3 times the length of the boiler, causing rapid circulation of the wafer in the numerous tubes. There is no waste of heat. The firepot is unusually deep and holds fire for long intervals without attention.

All Windsor Boilers are so carefully made throughout of only the highest grade materials that they are absolutely free from flaws or defects of any kind whatsoever . . . and positively will heat your building to the specified temperature if installed according to the plans and directions we furnish.

Shipping Points and Freight Charges

All Boilers shipped Not Prepaid from Chicago or Western Pennsylvania, whichever is nearer you.

For Estimated Freight Charges turn to Page 3 and look under "Boilers, Cast Iron Heating."

One of the Many Windsor Square Boilers Now in Use

A neat Hot Water Boiler installation in the home of Mr. Albert Lewandowski, Waukegan, Ill. He has a brick bungalow with 5 unusually large rooms. He selected a Windsor Square Boiler following the recommendations of our Engineering Department as to size of boiler and radiation required.

Every room in the house is comfortably heated at all times, with a surprisingly small amount of fuel, reports Mr. Lewandowski, who is very well satisfied. Ward's also supplied all the plumbing fixtures for this home.



Make Your Old Heating Plant Lead a CLEANER LIFE ...install a Windsor OIL BURNE



Use With Steam . . . Hot Water Warm Air or Vapor Systems



And Here's How the

Windsor Operates

For Easy Payments See Page 4

All parts of the Windsor Oil Burner are standard design and make.—You are not forced to pay excessive prices for specially designed replacement parts.

No shoveling, no waiting for the fire to "burn up," no dust, no ashes.

It's entirely automatic! Start it . . . set your thermostat for the temperature desired, and the fire will burn only long enough to reach the desired temperature . . . then it stops automatically. If your room temperature drops a couple of degrees it automatically

The Windsor can be installed quickly in almost any type of heating plant. The Windsor is carefully built and is so reliable in operation that its maintenance cost is very small.

You can change the temperature by moving the control pointer on the room thermostat.

It's economical as it uses low-priced oil and is exceptionally quiet in operation. Can be adjusted to heat from 5 rooms to a hotel.

These Features are Sure Proof of the Windsor Quality

Listed and inspected by Underwriters' Labora-tories, Inc., and bears their label.

Draft tube, transformer housing, motor sup-port and pump assembly support are all part of one rigid casting.

General Electric motor-meets all Utilities' power requirements.

Trumbull Switch No. 2224—Protects motor completely against overload.

completely against overload.

Has Minneapolis-Honeywell plain Room Thermostat without clock. 8-day Clock or Electric Clock thermostat may be had at extra charge.

Spun steel fan, Sirocco type, ample size, specially balanced. Mounted directly on motor shaft, insuring quietness, and maximum air delivery. Heavy supports adjustable to any height.

Pump, Strainer and Valve assembly mounted as a complete unit. May be removed individually. Green Krackle finish over black undercoat.

Draft tube with deflectors gives flame a swirling motion. Burns No. 3 (28 per cent to 32 per cent gravity) Heavy Fuel Oil.

Entire nozzle-transformer-ignition assembly can be removed as unit, from front without disturbing any other parts or connections.

Nozzle is made in 18 sizes ranging in capacity from 1½ to 10 gallons per hour, and in 45°, 60° or 80° angles so each installation may have best possible applications.

The Windsor has exclusive patented features that prevent interference with radio reception.

OIL BURNER COMPLETE with Minneapolis-Honeywell Thermostat (without clock), limit control and "protectorelay" (master control) but without oil tanks, piping or electric wiring, etc. State whether you have warm air furnace, hot water, steam or vapor boiler and the amount of standing radiation or warm air pipe area in square inches and we will furnish exactly the proper limit control and correct size nozzle. Ship. wt. 180 lbs. Shipped Not Prepaid from Rockford, Ill. Estimated Freight Charges under "Oil and Gas Burners" on Page 3. Write our Engineering Department for further information.

281 H 8143—With controls for up to 1500 sq. feet steam radiation or equivalent. \$185.00 281 H 8144—With controls for up to 4000 sq. feet steam radiation or equivalent. 245.00

OIL STORAGE TANKS Shipped from Factory in Chicago, Ill. or Saint Paul, Minn. Estimated Freight Charges under "Storage Tanks" on Page 3.

281 H7502—Standard Basement Storage Tank, with oil gauge, and stand, height 27 inches, width 44½ inches, length 66 inches. Cap. 275 gals. Ship. wt. 310 lbs. \$21.95 281 H7501—Underwriters' Labelled Underground Storage Tank. Diameter 48 inches, length 72 42.50 inches. Capacity 550 gallons. Ship. wt. 800 lbs. \$42.50

281 H 7501—Underwriters' Labelled Underground Storage Tank. Diameter 64 inches, length 72 57.50 inches. 1000-gallon size. Ship. wt. 1200 lbs

Windsor Heavy Duty Boiler

For Large Homes ... Schools ... Apartment Buildings

Here's the boiler for a lifetime of service. Use where the cost of operation makes it highly important to have the most efficient heating plant. As the combustible gases are distilled from the burning coal they are mixed with air and burned thoroughly. The fire travel is three times the length of the boiler; first to the rear, then front through the lower flues, and finally back to the rear where it leaves through the smoke outlet. The Windsor Heavy Duty Boiler is especially adapted to burning oil on account of its large combustion chamber. Heating surfaces are arranged to extract practically all useful heat from the hot gases.

For Hot Water, Steam and Vapor Systems — Burns Coal or Oil

Furnished with rocker type grates which are reinforced with double bridge webs to support an unusually large bed of coals. Shipped in sections for convenient handling through doorways. Smoke pipe collar 10 inches on 20-inch boilers, 12 inches on 25-inch. Water line, 47 inches on 20-inch, 49 inches on 25-inch. Jacketed boilers complete

with steam or hot water trimmings. If you need larger sizes write us for prices. Boilers Shipped Not Prepaid from Warehouse in Chicago. State size. See Estimated Freight Charges under "Boilers, Cast Iron Heating" on Page 3. May be bought on Easy Payments if you wish—for details See Budget Plan on Page 4.

IMPORTANT:-

Actual loads are net load ratings as published by Heating and Piping Contractors National Associaton

Wards Windsor Heavy Duty Hot Water Boilers—State Size Wanted

No. Sections and Width of	Firepot Size	Grate Area	Chimney Required			oings Return	Rated Capacity			281 H 7724 With	Without
Grate	Inches	Sq. Ft.	Ht. Ft.	Flue In.	Inches	Inches	Sq. Ft.	Sq. Ft.	Lbs.	Jacket	Jacket
6-20 in.	20 by 29	3.91	35	8 by 12	2-3	2-3	1850	990	2070	\$142.00	\$123.00
7—20 in.	20 by 347/8	4.70	35	8 by 12	4-3	3-3	2200	1190	2350	159.00	134.00
6-25 in.	25 by 35	5.95	35	12 by 12	2-4	2-4	2900	1440	3262	169.00	147.00
7—25 in.	25 by 42 1/8		35	12 by 12	4-4	3-4	3500	1730	3728	198.00	169.00
8—25 in.	25 by 493/4	8.29	40	12 by 12	4-4	3-4	4000	2020	4200	231.00	198.00

Wards Windsor Heavy Duty Steam Boilers-State Size Wanted Tappings Rated Actual Approx.

pply Return Capacity Load Ship, Wt.

ches Inches Sq. Ft. Sq. Ft.

Lbs. Chimney Required 281 H 7749 281 H 7744 With Without No. Sections and Width of Firepot Grate Supply Return Capacity Inches Inches Sq. Ft. Area Sq. Ft Grate Ft Jacket Jacket 8 by 12 8 by 12 12 by 12 12 by 12 12 by 12 20 by 29 20 by 347 25 by 35 25 by 427 25 by 49 3 \$142.00 1100 1300 600 720 2070 2350 \$123,00 159.00 169.00 134.00 147.00 169.00 -20 in. -25 in. -25 in. 1800 875 1050 3262 2125 2450 198.00



6 Section-Jacketed

Easy Payment Terms \$10 Down-\$11 Monthly

answer my dear is COPPER

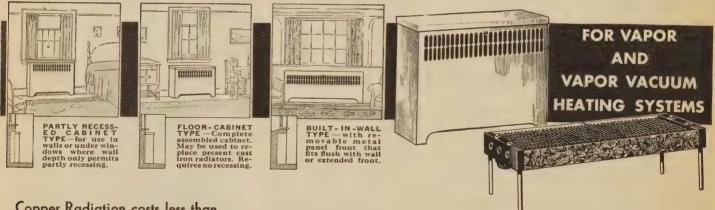


RADIATION.

Old style radiators took up so much space that I decided to replace them with these modern heating units that fit right in the wall. That pretty little grill under the window is all you see . . . and have you noticed that our house is warmer than it's ever been before?"

Mrs. C is just one of the many homemakers who praise this new type of heating system. It enables you to put furniture where you want it without having to allow for a lot of bulky radiators.

Three types ... completely concealed, partly recessed cabinets, or exposed cabinets. They take little space, and painted the color of your walls, their smart lines add greatly to the appearance of the room. This modern heating system costs no more for fuel than ordinary radiators, and because it is clean heat it keeps down decorating costs. It is simple and inexpensive to install.



Copper Radiation costs less than

Cast Iron Radiation with Enclosures

Steel cabinets and metal panel fronts are finished with a prime coat of dull gray-ready for finishing to conform with any color scheme. Connection to the pipes is same as in cast iron work, but installation is much easier because the unit is much lighter and easier to handle.

The cost per radiator, either partly recessed, panel front or fully exposed cabinet style is no more than for a cast iron radiator with enclosure.

You will be surprised how little it will cost to install a new, modern heating system or even to modernize your present system.

We believe that this is the most efficient heating unit ever devised for vapor and steam systems, because it uses the principle of air circulation to carry heat. Made of best quality materials and designed for a maximum heating surface with minimum resistance to air flow. Closely spaced copper radiating fins, bonded to copper tubes, give off heat quickly. The tubes are extra heavy and tested to withstand tremendous pressure.





We will do all the planning and figuring for your heating job-tell you what size boiler or furnace you need, what type, size and how many radiators you should have and, how much pipe, etc.—and how to install it yourself.

If you are remodeling, write and tell us the details of your present system and we will tell you whether or not you can use copper radiation. This type of heating is not applicable to all systems. Upon request we will mail you a

sketch blank which makes it easy for you to send us all the information we need to make a complete estimate for your building. (We will send you a detailed plan which will tell you exactly how much of everything you need and the cost.)

You'll have the comforting certainty that your heating plant will be efficient and will heat your whole house as you want it heated. All this valuable advice is FREE, and is given to you before you spend a cent!

CAST IRON RADIATION

.. with Trim Modern Lines

Slimmer Tubes and More of Them for

Better Looks and Greater Heating Surface

.... and here are the New Slim-Tube Radiators—the type of cast iron radiation that is specified by up-to-date architects. They're Modern—classic stream-line design. They're more Efficient—the slender tubes and wide spacing with proper proportion of heating surface to air space increases the amount of heat radiated amazingly. They're Convenient—may be installed under windows, along walls—almost anywhere. They're Dependable—high quality cast iron, perfectly machined, assures trouble-free installation. They're Priced Right.

Here's How to Figure Radiator Heating Surface

Wards' FREE ENGINEERING SERVICE will advise you how many square feet of radiation your home requires; if you will just write us. If you already know your requirements, you can figure the number of sections of each radiator by dividing the square feet required by the square feet given for each section. To determine length, multiply number of sections by the thickness of

Estimated Freight Charges and Shipping Points

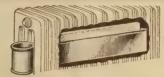
For Easy Payments see Budget Plan, Page 4. Shipped Not Prepaid from Chicago, or Western Pennsylvania. For total weight of radiators multiply the total amount of radiation in square feet by the shipping weight per square foot which is 5½ pounds. For Estimated Freight Charges see "Cast Iron Heating Radiators" on Page 3.

Note: Wall radiators and radiation in sizes and tubes not listed in the table below can be had at the same price per square foot. Write us for any information you need.

	Height of	Width of	Square Feet	Price Per
	Radiator	Radiator	Per Section	Square Foot
3-Tube Radiators	36 in.	51/8 in.	31/2	00
281 H 7873—Steam	30 in.	51/8 in.	3	
281 H 7863-Hot Water	26 in.	51/8 in.	21/3	
	20 in.	5½ in.	2½ 1¾	
4-Tube Radiators	36 in.	613/16 in.	41/4 31/2 23/4 21/4	00
281 H 7872—Steam	30 in.	613/16 in.	31/2	93°
281 H 7864—Hot Water	26 in.	613/16 in.	23%	
201 A 7004—Hot Water	20 in.	613/16 in.	21/	
5-Tube Radiators	36 in.	813/32 in.	5	00
281 H 7895—Steam	30 in.	8 ¹³ / ₃₂ in.	41/3	93c
281 H 7865—Hot Water	26 in.	813/32 in.	31/2	7.5
201 11 7005 110t Water	20 in.	813/32 in.	4½ 3½ 2½ 2½	
7-Tube Radiators	26 in.	12 in.	43/4 32/3	
281 H 7897—Steam	20 in.	12 in.	32/3	1 1 2 C
281 H 7867-Hot Water	16½ in.	12 in.	3	
AUX AA FOOT SACE TRACES	13½ in.	12 in.	21/2	



RADIATOR AIR MOISTENERS





Get all the heat you pay for . INSULATE YOUR PIPES NOW



Wool Felt Covering

Keeps hot and cold water pipes in outside walls from freezing. Layers of Asbestos felt, muslin covered. Keeps pipes from sweating and dripping during the summer. Lacquered brass bands for fastening. 3-foot lengths only. State pipe size. Shipped Not Prepaid from factory in Chicago, III. For Estimated Freight Charges see Page 3.

Article | Thick-|Lgth. | To Fit Standard Pipe Sizes—Inches | Price per Length | Pr

To Fit Standard Pipe Sizes—
Price per Length

1 1 1/4 1/2 2 2/2

33c 38c 42c 47c 50c 55c
2 2/2 3 3/2 4 4/2 3

Magnesia Insulating Blocks-1-Inch Thick

Boiler lagging for high pressure steam boilers. Order quantity wanted in square feet. Shipped Not Prepaid in blocks 6x36 inches from factory in Chicago, Ill. Ship. wt. per sq. ft. 1 lb. 24c

Laboratory Tests Show a 15% to 18% Savings on Fuel



Laboratory Tests have Laboratory Tests have definitely proved that the use of insulating materials results in greatly increased efficiency and a 15 to 18 per cent fuel saving, whether you burn oil, gas, coke or coal.



Air Cell Covering

For pipes of hot water and steam plants. Lacquered brass bands for fastening. In 3-foot lengths only. State pipe size. Shipped Not Prepaid from factory in Chicago, III.

Article Thick-Lgth. Number ness Feet	To Fit Standard Pipe Sizes—Inches Price per Length								
Pipe size inches	1/2	3/4	1	11/4	11/2	2	21/2	3	31/2 4
281 H 7927-1 34 in. 3	18c	19c	20c	24c	26c	28c	31c	35c	40c 45c
Ship. wts. lbs.	1 1/2	2	21/2	3	31/2	4	41/2	5	51/2 6
281 H 7928— 1 in. 3 Ship, wts. lbs	22c	25c	2/0	30c	33C	36c	40c	45c	50c 60c
Ship. wts. rbs.j	1 /2	1 6	4/2	3	13/2	4	4/2	1 3	3/2 0

Air Cell Asbestos Blocks-1-Inch Thick

ASBESTOS FIBER CEMENT



A compound of asbestos fiber and cement. For covering heating boilers, pipes, fittings and bends in pipe lines. Easy to apply yourself and save labor charges. A 100-pound bag covers 20 square feet one-inch thick.

Shipped Not Prepaid from factory in Chicago, Ill. For Estimated Freight Charges see Page 3.

ASBESTOS CEMENT



naces and stoves. Made of fire-proof material. Ship. wts. 3, 6 and 11 lbs.

Not Prepaid. 81 H 7918—2-lb. can ... 15c

ASBESTOS PAPER



For covering furnace pipes, walls, partitions, etc. In rolls 18 in. wide. Ship. wt. 25 and 50 lbs. 481 H 7916—210 sq. ft....\$1.50 481 H 7917—36-in. width. 429 sq. ft....\$295

BRONZE RADIATOR PAINT GOLD-ALUMINUM-BLACK

A high grade, ready mixed finish for any ornamental wood or metal surface. Use it on steam or hot water radiators in the home, auto radiators and parts, stoves, etc. Dries in a few hours to a hard, heat-resisting finish. State color. Ship. wts. 8 oz., 1 lb., 2 lbs., and 4 lbs.

Art. No.	Quantity	Black	Aluminum	Gold
75 H 8189		12c	15c	19c
75 H 8191		23c	29c	33c
75 H 8192		35c	45c	55c
575 H 8193	1 quart	59c	79c	98c

PIPE and FITTINGS for Warm Air Systems



Baseboard Register Box First Floor - One Room

Either single or double tin construction. For Heating one room. State register size.

		Single Tin	Double Tin
Reg. Size	Ship. Wt.	Each	Each
8 by 10 in.	3 1bs.	40c	\$1.10
8 by 12 in.	3½ 1bs.	45c	1.15
9 by 12 in.	4 lbs.	45c	1.15
11 by 13 in.	4½ lbs.	52c	1.30
12 by 14 in.	5 Ibs.	68c	1.60



Register Box Angle

1st Floor - One or Two Rooms 45 degree angle for Baseboard Register Box. State Register Size. For one room.

		281 H 8301 Single Tin	281 H 8401 Double Tin
Reg. Size	Ship. Wt.	Each	Each
8 by 10 in.	21/2 lbs.	26c	56c
8 by 12 in. 9 by 12 in.	23/4 lbs. 3 lbs.	26c 26c	62c 62c
11 by 13 in.	31/2 lbs.	33c	70c
12 by 14 in.	4 lbs.	45c	95c
P .		1 004 7777 0040	OOA TITE OAGO



Universal Boot

1st Floor - One or Two Rooms Connects pipe to Register Box. State pipe size. For one room register box.

281 H 8302 281 H 84 Single Tin Double 1	
Reg. Size Collar Ship. Wt. Each Each	
8 by 10 8 in. 3 lbs. 45c \$1.10	
8 by 12 9 in. 31/4 lbs. 49c 1.15	
9 by 12 10 in. 3½ 1bs. 49c 1.15	
11 by 13 12 in. 4 lbs. 57c 1.25	
12 by 14 14 in. 5 lbs. 85c 1.55	
	_
For two room register box 281 VH 8311 281 VH 8	411



Adjustable Elbows

Heavy gauge bright tin. Four separate pieces make possible adjustments up to 90 degrees. Single tin construction only. 281 H 8303-State pipe size

Pipe Diam.in	8	9	10	12	14
Ship. wt. 1bs	11/2	1 3/4	2	21/2	3
Each	26c	26c	33c	47c	80c



Warm Air Pipe

Heavy gauge bright tin. Tight-locking seams prevent collapsing. Shipped in two foot lengths with open seams. State pipe

281 H 8304-

Diam. Pipe, in.	8	9	10	12	14
Ship. wt. lbs	2	21/4	21/2	3	4
Per length	31c	33c	40c	49c	74c



Warm Air Furnace Pipe Damper

Heavy gauge galvanized sheet steel. Complete with damper clip and tail piece. Easily in-stalled. State pipe size.

281 H 8305-

Diam. pipe, in	8	9	10	12	14
Ship. wt. lbs	1	11/4	11/2	2	21/2
Each	15c	17c	19c	29c	38c



Adjustable Angles

Heavy gauge bright tin. Made in two pieces allowing for free adjustment up to 45 degrees. Segments fit securely together. Single tin only. State pipe

		201 12 (
Diam. pipe, in	8	9	10	12	14
Ship. wt. lbs	1	11/4	11/2	2	21/2
Each	16c	19c	22c	28c	52c

Conform to "Standard Heating Code"

• A complete line for your warm air installation. Each piece is made on precision machinery from the finest quality materials known to the industry. Careful inspection at the factory insures perfect fitting.

 Both single and double fittings conform strictly to the "Standard Heating Code" of The National Warm Air Heating Association.

The single tin fittings are sturdy and inexpensive and will give satisfactory service for years. Our heavy, strong double tin fittings are especially recommended because of a sealed air insulating chamber that gives additional protection against fire hazards, reduces heat loss and delivers more heat per pound of fuel.

• Whether you are going to install a complete Warm Air system or make repairs in your old one, our Engineering and Information Department will plan it for you completely, without cost, see Page 1.

Milhout cost, see Fage 1.
♠ All Warm Air fittings are shipped Not Prepaid from factories in Chicago, Ill., Medina, Ohio, Pittsburgh, Pa., Utica, N. Y., Kansas City, Mo. or Saint Paul, whichever is nearest you. For Estimated Freight Charges, see "Furnace Fittings" on Page 3.



Register Floor Pan — 1st Floor

Frictionless funnel style. Full size floor pans. State pipe size.

Reg. size	8x10	9x12	10x12	12x14	14x1
Collar	8 in.	9 in.	10 in.	12 in.	14 in
Wt., 1bs	11/4	11/2	2	21/2	3
281 H 8308					
Single Tin	34c	41c	45c	55c	90c
281 H 8408					
Double Tin	50c	60c	68c	82c	\$1.3

Register Floor Pan - 2nd Floor

For Wall Pipe. Ship. wts., 1 to 3 lbs.

Register size, inches	8x10	8x12
Pipe size, inches	3x10 40c	3x12 45c
	3x105/g	3x125/8
281 H 8415—Double 1in.	95c	\$1.05

Register Floor Pan - 2nd Floor

Ship, wts., 1 1/2 and 2 lbs. State size

Register size, inches	8x10	8x12
Pipe size, inches	3x10 40c	3x12 45c
Pipe size, inches	3x105/8 \$1.00	3x125/8 \$1.05



Baseboard Register Box First Floor - Two Rooms

Single and double tin Register Box for heating two first-floor rooms. With anchor straps. State size wanted.

Register size, inches Shipping weights, lbs	8x10 3	9x12 4
281 H 8309—Single Tin	52c	57c
281 H 8409-Double Tin	\$1.30	\$1.40



Baseboard Register Box Second Floor - One Room

Ship. wts., 31/2 and 4 lbs. State size.

Register size, inches	8x10	8x12
Pipe size, inches	3x10 40c	3x12 45c
Pipe size, inches	3x105/8 \$1.10	3x125/8 \$1.20



Baseboard Register Box

Second Floor - Two Rooms Ship, wts., 6 and 7 lbs. State size.

Register size, inches	8x10	8x12
Pipe size, inches	3x10 52c	3x12 57c
Pipe size, inches	3x105/8 \$1.30	3x125% \$1.40



Wall Pipe — Horizontal Angle

45 degree angle for Horizontal Wall Pipe. Ship. wts., 3 and 5 lbs. State

01201		
Pipe size, inches	3x10	3x12
281 H 8317—Single Tin		25c
Pipe size, inches	3x10%	3x125/8
281 H 8417—Double Tin	38C	44C

Wall Pipe - Vertical Angle

45 degree angle for Vertical Wall Pipe. Ship. wts., 3 and 4 lbs. State size.

Pipe size, inches	29c	3x12 31c
Pipe size, inches	3x105/8 58c	3x125 63c



Furnace Wall Pipe

Made of heavy gauge bright tin in both single and double styles. Joints are easily and securely made. Shipped nested. State clearly the number of lengths and sizes wanted.

Single Tin Wall Pine

Double Tin Wall Pipe

281 H 8423-State size and length wants

		G	
Length, in.	Ship. wts.	3x105% in.	3x125% in
2	½ 1b.	24c	28c
4	34 lb.	28c .	32c
12	2 lbs.	32c 47c	38c 55c
24	4 lbs.	85c	95c

Wall Pipe Adjustable Joint

Adjustable from 6 to 12 inches in length. Double tin only. Ship. wts., 1½ and 2 pounds. 281 H 8429—State size wanted.
3 by 10% in70c 3 by 12% in80c



Universal Boot

For Wall Pipe. Ship. wts. 3 1/2 and 5 lbs. State sizes.

Collar	8 in.	9 in.
Pipe, in	3x10	3x12
281 H 8324 Single Tin	41c	45c
Pipe, in	3x10%	3x12%
281 H 8424 Double Tin	\$1.00	\$1.15



Horizontal 90° Angle Ship. wts. 1 1/2 and 2 lbs.

3x10 Pipe, in . . . 281 H 8319 Single Tin . . Pipe, in ... 281 H 8419 Double Tip 3×10% 3×12%

65c

Vertical 90 Degree Angle

bilip. wts. 5 and .	+ IDS.	
Pipe, in	3x10	3x12
281 H 8320		
Single Tin		50c
Pipe, in	3x105%	3x125%
281 H 8420		
Double Tin	\$1.10	\$1.20



Wall Pipe Reducer Wall Pipe Reducer 281 H 8321 — Single tin. Reduces from 3 by 12 in. size to 3 by 10 in. Ship. ti. 4 lb 23c 281 H 8421 — D o u b le tin. Reduces from 3 by 12½ in. size to 3x10½ in. Ship. wt. 1½ lbs. .80c

Horizontal Head 2nd Floor — One Room Ship. wts. 2½ and 3 lbs.

Wall Pi	\$1.00	\$1.03
281 H 8425 Double Tin		
Pipe size	3×1054	3-1254
Single Tin	40c	45c

L5c	50c
10%	3x125/8
	\$1.00



Bonnet Collar

State whether collar is for straight or pitched hood. 281 H 8307—Single tin.

Wt.1bs.	8 1/2	9 5/8	10	12	14/2
Each	19c	22c	24c	29c	35c

Reducing Collar

Reduces one size only. Wts., %, % and 1 pound. 281 H 8312—Single tin.

Size, in.	9 to 8	10 to 9	12 to 10
Each	13c	14c	16c

REGISTERS for **Warm Air Systems**

BASEBOARD REGISTER



Face size	Ship. Weight	281 H 8365	281 H 8366
Inches	Pounds	Black Japanned	Antique Bronze
8 by 10	3	\$1.25	\$1.50
8 by 12	4	1.55	1.85
9 by 12	5	1.75	2.20
11 by 13	6	2.90	3.35
12 by 14	7	4.15	4.80

SIDEWALL

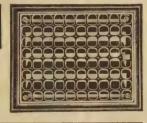
Installed above baseboard.
One-piece pressed steel vertical bar face. Valve opens to full 90 degrees. State register face size and kind of finish wanted.



Face size	Ship. Wt.	281 H 8367	281 H 8368
Inches	Pounds	Black Japanned	Antique Bronze
8 by 10	234	\$1.05	\$1.30
8 by 12	31/2	1.20	1.50

FLOOR REGISTER

Made of reinforced wrought steel. Sturdy shutter-valves are simple and easy to operare simple and easy to operate, and provide full air capacity. Wide body flanges relieve strains from register face. State register face size and kind of finish wanted.



Face Size	Ship, Wt.	Black Japanned	281 H 8370
Inches	Pounds		Antique Bronze
8 by 10	3 1/2	\$1.05	\$1.25
8 by 12		1.20	1.45
9 by 12		1.35	1.65
10 by 12 12 by 14	434	1.55 2.80 5.40	1.85 3.35 6.50
14 by 16	81/2	3.40	0.30

CEILING

lower floor to room immediate lower noor to room immediately above. Large capacity steel faces. Ceiling plate is white enameled, and floor register is enameled black with footoperated valve. Adjustable for floors from 4 to 11 inches thick.

461 H 6025—Shipped N	or repart nom broc	A. Giate Size.
Register Size	Shipping Weight	Each
8 by 10 ins. 9 by 12 ins. 10 by 12 ins. 12 by 14 ins.	7 pounds 10 pounds 15 pounds 18 pounds	\$2.00 2.65 3.25 4.75

Pressed Steel Cold Air Face

Heavy spot-welded braces. No careful fitting required. State size and fin-ish wanted.



Face Size	Ship. Wt.	281 H 8371	281 H 8372
Inches	Pounds	Black Japanned	Lacquered Oak
8 by 30	81/2	\$2.30	\$2.50
10 by 30		2.40	2.70
12 by 24	9	2.40	2.55
12 by 30		2.55	2.85
14 by 30	12	2.85	3,20
16 by 30		3.50	3,85
18 by 30	14	3.70	4.15
20 by 30	151/2	3.85	4.40

COLD AIR FITTINGS

Same high quality as our Warm Air fittings. Of 26-gauge steel, galvanized inside and out. Lock seams and crimped-edge joints insure a simple, compact, return line.

Two return lines, preferably from different sides of the house, should be installed for efficient circulation. Area of Cold Air returns should equal or exceed by 25% the total area of Warm Air leads. Use only 45-degree

Cold Air Pipe

Heavy galvanized steel with improved lock seams. In two foot lengths. State size.



Pipe size, in	14	16	18	20	22
Ship. wt. lbs	8	81/2	9	10	11
Per length	65c	76c	90c	\$1.05	\$1.25

Transition Head

Heavy gauge galvan-ized steel. State collar size wanted. 281 H 8361---



Collar diam., in	14	16	18	20	22
Ship. wt. 4bs		81/2	9	91/4	91/2
Each	\$1.55	\$1.70	\$1.85	\$2.10	\$2.45

Cold Air Collar

Galvanized steel plate and collar. State collar size. 281 H 8360-



Collar diam., in	14_	16	18	20	22
Ship. wt. lbs	4	41/2	5	7	8
Each	90c	\$1.00	\$1.05	\$1.15	\$1.25

Cold Air Boot With 45 Degree Collar

Provides large, friction-less passage for cold air returning to furnace. Collar is adjustable up to 45 degrees. Heavy gauge galvanized sheet steel. State collar size



				- U	
Collar diam., in		16	18	20	22
Ship. wt. lbs	71/2	8	81/2	10	13
Ship. wt. 1bs Each	\$2.30	\$2.50	\$2.90	\$3.30	\$3.80

turns unless lack of space permits only the use of 90-degree turns.

Not Prepaid. Unless otherwise specified, all items on this page are shipped from factories in Chicago, Ill., Medina, Ohio, Pittsburgh, Pa., or Utica, N. Y., whichever is nearest you. See "Furnace Fittings" on Page 3 for Estimated Freight Charges.

Cold Air Box

Heavy gal-vanized steel sec-tional cold air duct. For use across joists



Joints are easily made without use of tools or solder.

Shipped knocked-down.

281 H 8355—State size wanted.						
Pipe size, in Length, inches Ship. wt. lbs	30 8	30 10	11	30 12	30 13	
Each	72c	80c	90c	\$1.05	\$1.15	

Cold Air Box End

For closing end of cold air duct. 281 H 8362—State pipe size wanted.

PS	ipe size, in hip. wt. lbs	5x30	7x30 11/4	9x30 1½	1 3/4	13x30 2
E	ach	42c	47c	58c	75e	82c

Cold Air Elbow

Galvanized steel. Adjustable up to 45 degree angle. Crimped edges for tight joints. State size wanted. 28

1 H 8357—			- 1	Toler 1	
pe diam., in	14	16	18	20	
ip. wt. lbs	4	5	6	7	_
ch	57c	72c	88c	\$1.15	\$1

Cold Air Boot

For installation only where space will not permit use of No. 281 H 8358 Boot (shown at left). Heavy galvanized steel.

Collar is at 90 degree angle with furnace connections.

Ric	MICH II	HIHACC	COMMICC	
on.				
1 H	8359-	State	size.	
			OIBO:	
Mar	diam	in .	1 14	

ec-				
	16	18	20	22
	12	15	18	23
0	\$2.50	\$2.90	\$3,30	\$3.80

Collar diam., in Ship. wt. lbs		16	18	20	22
Each	\$2,30	\$2.50	\$2.90	\$3.30	\$3.80



Galvanized Smoke Pipe

Positive lock seams. In 2-foot lengths. State size and number of lengths wanted. 581 H. 7959—Shipped Not Prepaid from

STOCK.				
Diameter	7 in.	8 in.	9 in.	10 in.
Ship. wt. lbs	31/4	4	41/4	43/4
Per length	29c	33c	38c	42c

Galvanized Smoke Pipe Elbows

Pip

581 H 7961—Shipped Prepaid from Stock.

size.					
Diameter	Ship. Wt.	Each			
7 in. 8 in. 9 in.	1 lbs. 1 1/4 lbs. 1 1/2 lbs.	24c 29c 35c 40c			



Dampers 581 H 8059—Shipped Not Prepaid from Stock.

	Carato atmo					
Diam.	Ship. Wt.	Each				
7 in. 8 in. 9 in. 10 in.	34 lb. 1 lb. 1½ lbs. 1½ lbs.	16c 24c 35c 45c				



Permits hand operation of

damper from upstairs. In-dicates "Open," "Closed," and "Check." Oxidized copand "Check." Ordanzed copper finish, pressed steel body. 30-ft. safety chain, 4 pulleys, 2 "S" hooks, and wood screws for fastening to wall. Wt., 1 lb. 281 H 8373— Complete.....\$1.15



Sheet Metal Screws

Shipped Not Prepaid from Stock. Ship. wts. ½ and 1 lb. State length.

81 H 8376		
½ inch. Per box	,	.60c
4 inch.	J* 1	800



Galvanized Draw Bands

Adjustable. State size. 281 H 8377-

Diam.	Ship. Wt.	Each
7 inch	3/4 lb.	16c
8 inch	1 lb.	18c
14 inch	1½ lbs.	29c
16 inch	13/4 lbs.	33c
18 inch	2 lbs.	40c
20 inch	21/4 lbs.	45c
22 inch	21/2 lbs.	58c



Furnace Pipe Wire

2-lb. rolls. 281 H 8375---Per roll.....35c

Steel Chain

Box contains 36 ft. length. Ship. wt. 2 pounds. 281 H 8374—

HOT WATER . . STEAM and VAPOR ACCESSORIES

SUPPLIES FOR HOT WATER SYSTEMS



Windsor Automatic HOT WATER Pressure Regulator

Safe—economical—automatic. Will add water to system and maintain a safe and constant pressure. Speeds circulation. Saves fuel. Constructed throughout of highest quality brass and bronze. Threaded for ½-inch pipe connections. Easily installed. Instructions included. Mailable but Not Prepaid. Shipping weight 10 pounds.

.....\$8.95



Hot Water Radiator Valve

Solid brass, heavily nickel-

Complete with union. Mailable but Not Prepaid. 81 H 7900-State size.

Pipe Size	Ship. Wt. Lbs.	Each
34 inch 1 inch 1 14 inch 1 1/2 inch	1 ½ 2 ½ 2 ½ 2 ¾ 3 ¼	79c 95c \$1.20 1.50



Pressure Relief Valve

Entirely automatic. Entirely automatic. Prevents excessive pressure due to over-heating of closed hot water heating systems. Set for pressure of 30 lbs. Easily installed. Listed as standard by Underwriters', Inc. Mailable but Not Presumble of the present of the control of the standard by Underwriters', Inc. Mailable but Not Presumble of the present of the control of the standard by the control of the present of t Prevents

Laboratories, Inc. paid. Shipping weight 61/2 pounds. 81 H 5416—Each \$3.25



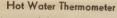
Regulates draft and check damper according to water temperature. Complete with lever, weights, pulleys and chain. Japanned steel body. Threaded for 1-inch boiler connection. 81 H 7858.... \$5.75

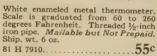
Compound Altitude and Pressure Gauge



Registers height and pressure of water. For closed or gravity hot water heating systems, 3½-in. face. Threaded for ½-inch pipe connection. Mailable but Not Prepaid. Ship. wt. 12 oz.

81 H 7914......\$1.05







Radiator Key Air Valves

Brass, nickel-plated, 1/8-in. thread. Ship. weight each 3 ounces.



Boiler Stop Leak Liquid

Stops boiler leaks quickly and effectively. Removes and prevents scale formation. Instructions included. Shipping weight

81 H 5610—1-qt. can.....95c

VAPOR SPECIALTIES



Modulating Packless Valve

For vapor or vacuum. Leak-proof. Quick opening. Graduated dial, with wheel or lever handle. Nickeled bronze. Mailable. Not Prepaid. Shipped from Eastern Pennsylvania. Wts., 11/2, 2, 21/2 lbs. State type of handle and size.

281 H 7600—With union. Pipe size, inches !/2 3/4 1 Radiation Cap. sq. ft . 25 65 125 Each.....\$2.40 \$2.80 \$3.30



Compound Gauge Registers Pressure

Registers Pressure and Vacuum. 3½-in. face, black steel case. With stop cock. Threaded ¼ in. Wt. 1¼ lbs. Mailable but Not Prepaid. 81 H 7921 ... \$1.75

Air Eliminator

For rapid air elimination For rapid air elimination on vapor vacuum systems. Radiation capacity, 2000 sq. ft. No leaking, no vibrating. Closes instantly and positively against water and steam. Nickel-plated bronze. % inch pipe thread. Mailable. Shipped Not Prepaid from Stock.

81 H 7602—Wt. 4 lbs.....\$6.95

Thermostatic Radiator Trap

For vapor, vacuum and low pressure steam. Self-aligning thermal unit. In angle, right or left corner offset or straight patterns. Nickeled bronze. Mailable. Shipped Not Prepaid from factory in Eastern Pennsylvania. Ship. wts., 1½ and 2 lbs. State pattern and size. For vapor, vacuum

281 H 7601-With union.

Pipe size, inches. Radiation Cap. sq. ft.. 100 700 Each..... \$2.70 \$4.75

Steam Gauge

Registers pressure up to 30 lbs. 3½-in. face, black case and rim. Threaded¼inch. Ship. wt. 1 lb. Mailable but Not Prenaid paid. 81 H 7913.....



Vacuum Quick Vent

Usually placed at end of main for rapid elimination main for rapid elimination of air on vapor vacuum systems. Will close against steam but not against water. Prevents return of air to the system. Same fine construction, as Air Eliminator at left. Threaded ½-in. pipe size. Ship, wt. 2 lbs. Mailable. Shipped Not Prepaid from Stock.

81 H 7603.....\$4.50

Boiler Return Trap

For vapor or low pressure steam \$5850

systems. An efficient, positive device for returning condensation direct to the boiler. Prevents damage to the boiler due to water becoming locked in the system. Capacity 2500 sq. ft. radiation. No adjusting; positive, simple and noiseless. Heavy outside casting of high grade cast iron. Instructions included. Shipped Not Prepaid from factory in Eastern Pennsylvania. Shipping weight 105 pounds. For Estimated Freight Charges see Page 3 under "Boiler Parts."

281 H 7604—Complete with water gauge \$58.50





Tank for Hot Water Gravity Systems

For installation in attic or other high point in system. Heavy galvanized steel, welded and riveted. Standard tappings for pipe connections. Not Mailable. Shipped Not Prepaid from Stock. For Estimated "Galvanized Tanks."

181 H 7905-State capacity tank wanted.

Capacity in Gallons	Size, In.	Radiation Capacity	Ship. Wt.	Each
15 gal.	12x30	- 500 sq. ft.	43 lbs.	\$6.20
20 gal.	14x30	700 sq. ft.	58 lbs.	7.95
26 gal.	16x30	950 sq. ft.	68 lbs.	9.85



Basement Tanks

18 Gallon

For Hot Water Closed or Pressure Systems. Located on the basement ceiling about 5 feet away from the boiler. Rolled copper bearing steel, painted red. Two ½-inch tappings. Not Mailable.

Not Prepaid. Shipping weights, 47, 58, and 65 pounds. Estimated Freight Charges on Page 3 under "Galvanized Tanks."

181 H 7906-State capacity tank wanted.

Capacity n Gallons	Size, In.	Radiation Capacity	Each
18 gal.	12x36	350 sq. ft.	\$5.35
24 gal.	12x48	600 sq. ft.	6.35
30 gal.	12x60	800 sq. ft.	6.95



SUPPLIES FOR STEAM OR VAPOR SYSTEMS



Radiator Syphon Valve

Non-adjustable.
Automatic. Will free radiator of air as long as steam is entering, without excess pressure. All-metal thermostatic float. Chrome plated. Ship. weight 4

81 H 7990-Each...69c

81 H 7989\$1.45 Radiator Air Valves Non-syphon type. Adjustable. Automatic. Nick-el-plated Brass. type. Sy-phon tube 81H 7911—Each... 19c

Automatic float prevents sputter. Ship.wt.4oz. 81H 7902—Ea...29c

Prevents return of air to the radi-ator and creates vacuum as steam ure drops, keeping radiator warm. Chrome plated. Ship. weight 4 ounces.

Radiator

Vacuum

Valve

Steam Radiator Valve

Brass, nickel-plated. Complete with Union. Mailable but Not Prepaid.

1	81 H 7901—	State size.	
	Pipe Size Inches	Ship. Wt. Lbs.	Each
	3/ ₄ 1 11/ ₄ 11/ ₄	13/4 21/4 3 43/4	87c \$1.10 1.39
(FI)	1/2	7-/4	1.75



Steam Boiler

Water Feeder
This "boiler watchman" adds water to the boiler as required. Cast iron. Working parts are brass and monel metal. Tapped for 3/4 and linch pipe. Mailable. Shipped Not Prepaid

from Stock. 481 H 7610—Ship. wt. 55 lbs...\$38.50



For vapor and low pressure systems. to pressure variations of 1 ounce, and opens or closes check and draft. 7-inch diaphragm. Lever, chain, pulleys and weights included. 1-in. thread. Mailable but Not Prepaid.
481 H 7611—Ship. wt. 35 lbs.\$13.25

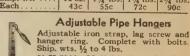
HOT WATER and STEAM SUPPLIES



Union Elbows

Brass, nickel-plated. To be used with hot water or steam radiator valves. Mailable but Not Prepaid. 81 H 7904-State size wanted.

Pipe size Ship. wt	3/4 in.	1 in.	11/4 in.	1½ in.
Each	43c	55c	72c	90c



81 H 7946-Mailable but Not Prepaid. State size.
Pipe size, in... 3/4
Each...... 7c 1½ 10c Pipe size, in. 2 2½ Each 12c 15c 18c

Floor and Ceiling Plates
Nickel-plated. *Mailable but Not*Prepaid. Ship. wts. 2 to 6 ounces.
81 H 8259—State size.
3/4-in. 1-in. 11/4-in. 1/2-in.
6c 7c 8c 9c 10c



Boiler Flue Brush



BRASS PIPE

- It Cannot Rust—Everlasting
- Tested to 2500 Lbs. Pressure

When you build a home—build for permanencel When you make a repair—repair for the last time. Use Brass Pipe—it cannot rust!

The U. S. Government specifies Brass Pipe and Fittings for all its buildings. These buildings are built to last scores of years. One repair job can easily cost more than the difference in cost between Brass Pipe and other kinds. In addition, you are assured of a permanent supply of clean, pure water. Freedom from rust, is freedom from care and worry! Brass Pipe is more than Four times as strong as steel pipe—it is seamless and practically burst-proof, even under extreme conditions.

181 H 5510—½-inch. Per foot... 181 H 5510—¾-inch. Per foot...

- Full Iron Pipe Sizes
- Standard Weight and Gauge

Ward's Brass Pipe is drawn to uniform thickness, each and every piece is standard gauge and weight. It's Full Iron Pipe Size—will connect right into your present iron fittings for repair work. However, it is best to use brass fittings with Brass Pipe. This will insure a permanent installation.

All Prices subject to market changes. All Frices subject to market changes. Not Fre-paid. State size. Estimated Freight Charges listed under Brass Pipe on Page 3. Furnished in 12-ft. lengths—unthreaded. Each threaded end 5c extra. Ship. wts., 1 and 11/4 lbs. per ft.



BRASS FITTINGS



Elbows

Ship. wts., 6 and 8 oz. each. Not Prepaid. State size.

90° Elbows

81 H 5511-	-	-						
½-inch ¾-inch								.7
3/4-Inch	•	٠	٠	•	٠	٠	•	10

45° Elbows

OI LT 221	4	~~	=				
½-inch ¾-inch							7
3/4-inch					٠	1	0



Rough cast brass. Ship. wts. 6 and 8 ounces each. Not Prepaid. State pipe size wanted.

81 H 5514--1/2-inch 3/4-inch6c



Each opening is same size. Shipping weights 6 and 8 ounces each. Not Prepaid. State size.

¹/₂-inch 10c ³/₄-inch 14c



Nipples

Ship. wts. 6 and 8 oz. each. Not Preoz. each. Not P paid. State size.

Long Nipples

81 H 55	17	-	_						
1/2-inch 3/4-inch									(
3/4-inch			۰	۰	۰	۰	۰	1	

Short Nipples

81 LT 221	0-	_			
½-inch					.4c
1/2-inch 3/4-inch					.6c



Unions Unions

Rough cast brass. Ship. wts. 6 and 8 ounces each. Not Prepaid. State pipe size wanted.

81 H 5513	-	-			
½-inch ¾-inch					.22c
3/4-inch					.30c



Ship. wts. 6 and 8 oz. each. Not Prepaid. State size and opening to be reduced. 81 H 5518—

1/2-inch 3/4-inch

BRASS VALVES - Quick Service at Ward's



Brass Anale and Globe Valves

Cast brass body with quick tight closing seats. 125 lbs. working pressure. Not Pre-

Anale Valves

Ground brass disc and seat. State size.

81 H 5402

8 oz. 32c 1.6 36 12 oz. 34c 1.7 ½ 1 lb. 46c 2.3 34 1½ lbs. 60c 3.0 2 lbs. 80c 4.0 ¼ 3 lbs. \$1.10 5.5	ize	Wt.	Each	6 for
36 12 oz. 34c 1.7/ 12 1 lb. 46c 2.3/ 34 1½ lbs. 60c 3.0/ 2 lbs. 80c 4.0/ 3 lbs. \$1.10 5.5/	1/8			
½ 1 1b. 46c 2.3 34 1½ 1bs. 60c 3.0 2 1bs. 80c 4.0 4 3 1bs. \$1.10 5.5	1/4			
2 lbs. 80c 4.0 3 lbs. \$1.10 5.5	3%			
2 lbs. 80c 4.0 3 lbs. \$1.10 5.5	1/2			
1/4 3 1bs. \$1.10 5.5	3/4	1½ lbs.		3.00
				4.00
1/6 41/6 lbs. 1.60 8.0	1/4			5.50
	1/2	41/2 lbs.	1.60	8.00
8 lbs. 2.35 11.7		8 lbs.	2.35	11.75

Globe Valves

With ground brass disc and seats. State size.

81 H 5400

Pipe Size	Ship. Wt.	Each	6 for
1/8	8 oz. 8 oz. 12 oz.	30c 31c 33c	\$ 1.50 1.55 1.65
78/23/4	12 oz, 1 lb, 1½ lbs,	43c 55c	2.15
1/4	2 lbs. 3 lbs.	75c \$1.05	3.75 5.25
11/2	4½ lbs. 8 lbs.	1.55	7.75

J. D. Type Angle and Globe Valves

Renewable composition disc. For pressure up to 125 pounds steam, 150 pounds of water. Shipping weights 8 ounces to 8 pounds. State size wanted. Not Pre-

Angle Valves

Pipe Size	81 H	5403
Pipe Size	Each	6 for
1/4 in.	35c	\$1.75
¾ in.	39c	1.95
/2 in.	50c	2.50
% in.	65c	3.25
1 in.	90c	4.50
1 1/4 in.	\$1.20	6.00
1½ in.	1.75 2.65	8.75 13.25
2 in.	2.05	13.23

Globe Valves

Size	81 H	5401
Size	Each	6 for
n.	35c	\$ 1.75
		1.95 2.50
	65c	3.25
n.	90c	4.50
		6.00 8.75
		13.25
	n. n. n.	Each 10. 35c 11. 39c 11. 50c 11. 90c 11. 1.75

Brass Gate Valves Full pipe opening, Test-

ed for 125 lbs. working pressure. Ship. wt. 1½ to 7 lbs. Not Prepaid.

81 H 5406-State size

1/3	60c 80c	6 for \$3.00 4.00 5.50	11/4	\$1.40 1.85 2.70	6 for \$7.00 9.25 13.50



Swinging Check Valves

Swing check. Ship. wts. 12 oz. to 6 lbs. Not Prepaid.

81 H 5410-State size.

PipeSi	ze E	Cach	6 for	Pipes	Size	Each	6 for
3/8 ii 1/2 ii 3/4 ii	a. a.	80c 85c 95c	\$4.00 4.25 4.75	1 1/4 1 1/2 2	in. in. in.	\$1.55 1.95 2.95	\$7.75 9.75 14.75
1 % ii	a. \$	95c 1.20	6.00	2	in.	2.95	14.75

Sill

Faucet

Vertical Check Valves

Compression

Stop and

Waste Cocks

Rough cast brass. Stuffing box and thumb screw waste

Stuffing box

Cast brass, rough finish. Not

Shipping weight 11/4 and 11/2 lbs Not Prepaid.

81 H 5429-State size wanted.

34-in. 55c \$2.75

81 H 5413-State size.

T TPC DIZE	Onip. W.	Datii	0 101
% in.	1/2 1b.	50c	\$2.50
½ in.	¾ 1b.	55c	2.75
¾ in.	% lb.	70c	3.50
1 in.	1 1/4 lbs.	\$1.00	5.00



Rough nickel plated brass. Standard hose connection. Wheel key handle. Ship. wt. 1½ lbs. Not Prepaid.

81 H 5419 - State

Pipe Size ½-in. ¾-in. Each... 49c 54c 6 for... \$2.50 \$2.75

Stop and Waste Cock

Solid brass. State size. 81 H 5421 — Ship. wts. 1¼, 1¾, 2¼, and 4 lbs.

Pipe Size	Each	6 fo
1/2	55e 75c	\$2.7
1/4	\$1.25	6.2

Brass Stop Cock

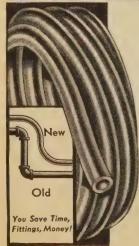
Copper Tubing

Flanging Tool

Lever handle. Solid brass. Tapped for iron pipe connections. Ship. wt. 1, 1½ lbs. Not Prepaid. 81 H 5423 — State

Pipe Size,		
nch	1/2	3/4
Each	50c	70c
for	\$2.50	\$3.5

UBING and ACC



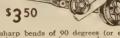
- Rust and Corrosion-Proof
- Freeze-Proof-Heat-Proof
- Tested to 2000 Lbs. Pressure
- Best and Quickest for Repairs and Replacements

Made of 99.9% Pure Copper—so permanently resistant to the elements that the only way you can put it out of service is to remove it! Rust—corrosion—freezing—intense heat—all have no effect on it. Annealed—it expands with freezing water and can be bent without restricting the water way. Such a material can't be anything else but permanent! Your first cost is your last one!

Easy to install—you can run it around corners, between walls and under floors in one continuous piece. This means speed in new buildings—and a big saving on the cost of cutting through walls and floors in repair jobs. No thread cutting is necessary—uses compression fittings like the gasoline line in an auto. Furnished in lengths up to 60 ft. Prices subject to market changes. Not Prepaid. State size.

581 H 5550—Standard We ½-in. inside diameter. Shi ¾-in. inside diameter. Shi	ght for Inte o. wt. per ft. o. wt. per ft.	rior Use only. . 5 oz	Price per Foot 8½ c 13¼ c
581 H 5570-Extra Heavy	for Undergr	ound or Interior	,
Use. ½-in. inside diameter. Shi ¾-in. inside diameter. Shi	o. wt. per ft.	6 oz 10 oz	10c

Bending



For making sharp bends of 90 degrees (or even 180°). Uses minimum space in cramped quarters. With ordinary care, will not kink or flatten tube. Full instructions included. For use with %, ½, % and 1-inch tubing. Not Prepaid. 81 H 5559-Ship. wt. 51/2 lbs \$3.50



Ship, wt.½-34.inch, 1 lb., Not Pre-said. State size. Not Pre-said. State size. State stubing to iron pipe. ½-in. 42c 34-in., 54c 81 H 5557 — Connects copper to copper. ½-in. 42c 34-in., 54c

Drop Elbow Shipping weights 8, 12 ounces. Not Prepaid.

81 H 5561-State size. 1/2 -inch copper to 3/4 -in. iron pipe...

90° Elbow Ship. wts. 12 oz. and 1 lb. Not Prepaid.

Ouick easy method of flanging ends of copper tubing smoothly and evenly for tight joint. Ship, wt. 8 and 12 oz. Not Prepaid.
81 H 5558—State size, ½-inch. 32c 4-inch. 39c

81 H 5554 — Connects copper to iron pipe.
81 H 5555 — Connects copper to copper.

Male Adapter 81 H 5552 — Connects iron pipe to copper tubing. Ship. wt 12 oz. and 1-ib. State size. Not Pre-



81 H 5560— Connects iron pipe to copper tubing. Ship. wts. 8 and 12 oz. State size. Not Prepaid. Size 1/2 -inch..23c 3/4 -in..32c

Female



If You Don't See What You Want Here See Our General Catalog

"Anything from a pin to an anchor" used to be the old saying about the mail order catalog. And that just about covers the big variety of necessities you'll find in Ward's General Catalog today.

In Tools, Hardware, Paints, Lighting Fixtures, Roofing, it's the guide to exactly the quality you want at money-saving prices. After ordering from this Plumbing, Heating and Building Material Catalog, turn to your copy of our General Catalog for those other things you need and increase your saving!



High Grade Cast Iron . . Uniform Thickness and Strength . . Asphaltum Coated Inside and Out

THESE PRICES ARE FOR 5-FOOT LENGTHS OF PIPE. NOT PREPAID.

	Standard	Weight-Single Hub	
181	H 6760—Size 2 in.	Ship. wt. 19 lbs	181 H 67
101		y Weight—Single Hub	181 H 670
181	H 6761—Size 2 in.	Ship. wt. 29 lbs89c	181 H 67

181 H 6761—Size 4 in. Ship, wt. 65 lbs. For Estimated Freight Charges on Soil Pipe and Fittings See Page 3

62—Size 2 in. Ship. wt. 20 lbs... 62—Size 4 in. Ship. wt. 36 lbs... Extra Heavy Weight-Double Hub

Standard Weight-Double Hub



CAST IRON FITTINGS

Tapped "T" Branch Side branch tapped for iron pipe. Ship. wts.: 4, 7½ and 11 lbs. Not Prepaid. State size. 481 H 6784—Standard.
2 by 1½ inches. Each....
4 by 1½ inches. Each....
4 by 2 inches. Each.... Ship.

Plain "P" Trap

Not Prepaid

481 H 6810—Standard. Shipping weight 19 lbs. 4-inch size. Shipping weight 1910s.
Each. 93c
481 H 6811—Extra Heavy.
4-inch size. Shipping weight 27
pounds. Each. \$1.04

Running Trap With Vent

Shipping weights 20 and 30 lbs. Not Prepaid.
481 H 6825—Standard.
4-inch size. Each. \$1.36
481 H 6826—Extra Heavy.
4-inch size. Each. 1.70



Eighth Bends Not Prepaid

481 H 6770—Standard. 2-inch size. Shipping weight 31bs.

Sanitary "T" Branch Not Prepaid 481 H 6774 Standard, State size.

Size, In. |Ship.Wt.| Each 2 by 2 7 lbs. 4 by 2 12 lbs. 4 by 4 14 lbs.

481 H 6775 — E x t r a



Sanitary

Tee

4-inch with 2-inch side inlet.
Shipping weights: 20 and 27 pounds. Not Prepaid. Picture shows R. H. Inlet.

481 H 6766 — Stand-ard. R. H. inlet...\$1.33

481 H 6767 — Extra heavy R. H. inlet. \$1.48

481H 6768 — Standard. L. H. inlet. . \$1.33 481 H 6769 — Extra heavy L. H. inlet. \$1.48

Quarter Bends Not Prepaid

45 Degree "Y" Branch

481 H 6792

State size Not Prepaid

Size, In. Ship. Wt. | Each

481 H 6764—Standard. 2-inch size. Shipping weight 41bs.



Not Prepaid

481 H 6776—Standard weight 4-inch size. Shipping weight 4-inch size. 20 pounds. Each...

Tapped

Sanitary

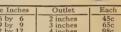
"T" Branch Tapped for iron pipe. Not Prepaid. State size. 481 H 6798—Standard.

5 lbs. 7 lbs. 7 lbs. 481 H 6793 — E x t r a Heavy. State size. 481 H 6799 — E x t r a Heavy. State size. Long Increasers

Long increasers
Used at top of the soil pipe stack where pipe passes through roof.
Ship, wts. 13, 19, 22 and 34 pounds. Not Prepaid.
481 H 6852—Standard. Increases from 2 to 4 inches. Length 24 inches. ... \$4c
481 H 6853—Extra Heavy... \$1.04
481 H 6854—Standard. Increases from 4 to 5 inches. Length 30 inches. \$1.33
481 H 6855—Extra Heavy... 1.64

Floor Drain

Shipping weights 5, 8 and 12 pounds. Not Prepaid. 81 H 6738 — S t a t e





Cleanout Plugs Standard. Wts. 31/2, 4 lbs. Not Prepaid.

81 H 6841

CAST IRON DRAINAGE FITTINGS

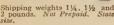
90° Drainage Elbow



Shipping weights 1½, 2 and 2¼ pounds. Not Prepaid. State size.

Pipe Size	81 H 5652 Black Each	81 H 5653 Galvanized Each
11/4	12c 15c 22c	14c 17c 24c

45° Drainage Elbow



Pipe Size	81 H 5650 Black Each	81 H 5651 Galvanize Each
11/4	12c 15c 22c	14c 17c 24c

Long Turn 90° Elbow



State size. Size, inches.... 11/4 11/2 2 81 H 5666— Black..... 14c 17c 26c 81 H 5667— Galvanized,... 16c 19c 30c

45° Drainage

Street Elbow

81 H 5668— Black.....

Shipping weights 1, 2 and 3 pounds. Not Prepaid. State size.
Size, inches 11/4 11/2 2

90° Long Turn "Y" Branch

Shipping weights 2¾, 3½ and 5½ pounds. Not Prepaid. State size.
Size, inches.... 1¼ 1½ 2 81 H 5656— Black...... 25c 30c 48c 81 H 5657— Galvanized.... 27c 32c 50c





CAST IRON STEAM FITTINGS

Straight and Reducing Tees

When ordering state largest opening first. Largest opening governs price. Reduce one size only at branch or one end opening. Size given is large end. State size. Ship. wt., each, I to 141bs. Not Prepaid.

Pipe Size	Straight Sizes 81 H 4906—Black		Reducing Sizes 81 H 4912—Black		Pipe Size	Straigh 81 H 490	nt Sizes 6—Black	Reduci 81 H 491	ng Sizes 2—Black
5120	Each	6 for	Each	6 for	Size	Each	6 for	Each	6 for
3/4	7c	- 35c	8c	40c	2	26c	\$1.30	30c	\$1.50
11/4	9c 14c	45c 70c	10c 17c	50c 85c	21/2	45c 65c	2.25 3.25	50e 75e	2.50 3.75
11/2	18c	90c	21c	\$1.05	4	\$1.05	5.25	\$1.20	6.00

Straight and Reducing Elbows

									-
Pipe Size	90° Elbows Straight Sizes 81H4900—Black		90° Elbows Reducing Sizes 81H4902—Black		Pipe Size	Straig	lbows ht Sizes 0—Black	Reduci	lbows ng Sizes 2—Black
	Each	6 for	Each	6 for		Each	6 for	Each	6 for
3/4 1 1 1/4 1 1/2	5c 7c 10c 12c	25c 35c 50c 60c	6c 6c 11c 14c	30c 30 a 55c 70c	2 2½ 3 4	18c 29c 43c 70c	90c \$1.45 2.15 3,50	20c 35c 50c 85c	\$1.00 1.75 2.50 4.25

Drainage "T" Branch



Shipping weights 4, 5 and 7 lbs. Not Prepaid. State size. 81 H 5658—Black Size... 1½ inch 1½ inch 2 inch Each... 20c 25c 30c

81 H 5659—Galvanized Size.... 1¼ inch 1½ inch 2 inch Each... 22c 32c 38c

81 H 5661—Galvanized

1½ inch 2 inch
30c 44c Size..... Each....

Hub Top Sanitary

Branch and end for threaded pipe. Hub for caulking.
Ship. wt. 4 lbs. Size 1½ inch. Not

11/4 11/2 2

..... 14c 17c 24c 81 H 5669— Galvanized.... 16c 19c 26c

Drainage

Galvanized Long Screw

Seamless.
Lock nut
faced. Shipping wts., 2½ and 3
lbs. Not Prepaid. State size.

81 H 5662

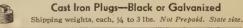
Pipe Size In.	Lgth. Inches	Each
11/4	5 1/2	69c 79c

When ordering state largest opening first. Largest opening governs price. Reduces one size only. Sizes given are largest end. Shipping weight, each, 1 to 10 pounds. Not Prepaid. State size.

Pipe Size	90° E Straigh 81 H 4900	t Sizes —Black	Reduci: 81H4902	lbows ng Sizes 2—Black	Pipe Size	Straig	lbows ht Sizes D—Black	90° Elbows Reducing Sizes 81H 4902—Black		
	Each	6 for	Each	6 for		Each	6 for	Each	6 for	
1 3/4	5c 7c	25c 35c	бс бс	30c 30g	21/2	18c 29c	90c \$1.45	20c 35c	\$1.00 1.75	
11/4	10c	50c	11c	55c	3 3	43c	2.15	50c	2.50	
11/2	12c	60c	14c	70c	4	70c	3.50	85c	4.25	

Flange Unions With Gasket

81 H 4908—Not Prepaid. Wts., each $2\frac{1}{2}$ to 161bs. Pipe size, in $\frac{3}{3}$ 1 1 1 1 1 2 2 2 2 2 3 4 Each . . . 30c 34c 42c 50c 65c 75c 90c \$1.30 6 for . . . \$1.50 \$1.70 \$2.10 \$2.50 \$3.22 \$3.78 \$4.50 6.50



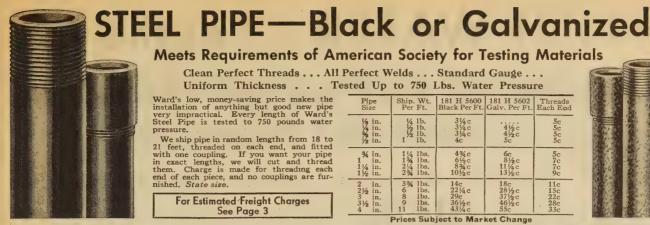
Pipe Size	81 H Bla	5388 ck	81 H 5389 Galvanized		Pipe Size		5388 ack	81 H 5389 Galvanized	
In.	Each	6 for	Each	6 for	In.	Each	6 for	Each	6 for
1/4 3/8 1/2 3/4 1 1 1/4	2c 2c 2c 2½c 2½c 2½c 3c	10c 10c 10c 13c 13c 13c	2½c 2½c 3c 4c 5c 6c	13c 13c 15c 20c 25c 30c	1½ 2 2½ 3 4	5c 6c 11c 15c 26c	25c 30c 55c 75c \$1.25	9c 12c 22c 30c 52c	45c 60c \$1.10 1.50 2.60

45 Degree

To run pipe on angle. Ship. wts., each 1 to 8 lbs. Not Prepaid.

81 H 4904 State size

ze	Each	for
4	6c	30c
4	7c 12c	35c 60c
2	15c 21c	75c \$1.05
2	35c 52c 85c	1.75 2.60 4.25



Meets Requirements of American Society for Testing Materials

Clean Perfect Threads . . . All Perfect Welds . . . Standard Gauge . . . Uniform Thickness . . . Tested Up to 750 Lbs. Water Pressure

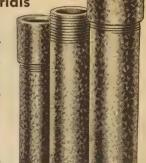
Ward's low, money-saving price makes the installation of anything but good new pipe very impractical. Every length of Ward's Steel Pipe is tested to 750 pounds water

We ship pipe in random lengths from 18 to 21 feet, threaded on each end, and fitted with one coupling. If you want your pipe in exact lengths, we will cut and thread them. Charge is made for threading each end of each piece, and no couplings are furnished. State size.

For Estimated Freight Charges See Page 3

T T T T T T T T T T T T T T T T T T T											
Ship. Wt.	181 H 5600	181 H 5602	Threads								
Per Ft.	Black Per Ft.	Galv. Per Ft.	Each End								
1/4 lb. 1/2 lb. 1/2 lb. 1 lb.	31/4 c 31/4 c 31/4 c 4 c	4½c 4½c 4½c 5c	5e 5e 5e 5e 5e								
1¼ lbs.	4%c	6c	5c								
1¾ lbs.	6½c	8½c	7c								
2¼ lbs.	8%c	11¼c	7c								
2¾ lbs.	10½c	13½c	9c								
3% lbs.	14c	18c	11c								
6 lbs.	22¼c	28½c	15c								
8 lbs.	29c	37½c	22c								
9 lbs.	36½c	46½c	28c								
11 lbs.	43¼c	55c	33c								
	Per Ft. 4 lb. 2 lb. 2 lb. 1 lb. 1 lb. 1 lb. 1 lb. 2 4 lbs. 2 4 lbs. 2 4 lbs. 3 4 lbs. 8 lbs. 9 lbs. 9 lbs.	Per Ft. Black Per Ft.	Per Ft. Black Per Ft. Galv. Per Ft.								

Prices Subject to Market Change



OUPLINGS AND NIPPLES



Couplings Wts., 1 oz. to 5 lbs. each. State size. Mailable, Not prepaid.



Wrought Steel Nipples

When ordering nipples, be sure to state whether close, short or long are wanted. Also state pipe size. Nipples longer than 6 in. are classified as pipe. Wts., 4 oz. to 6 lbs. each. Mailable, Not prepaid,

		COUP.	LINE	SS	WROUGHT STEEL NIPPLES										
Pipe	01.7	1 5378	01.7	I 5379		Clo	se and	Short				Long			
Size In.		lack		alv.	81 H Bla	ack	81 H Ga	lv.	Close Lgth.	Short Lgth.		ack	81 H Ga		Length In, by
	Each	6 for	Each	6 for	Each	6 for	Each	6 for	In.	In.	Each	6 for	Each	6 for	½ In.
1/8	2c	10c	2c	10c	2c	10c	2c	10c	3/4 7/8	11/2	21/2c	13c	31/2c	18c	2 to 6
1/4	2c	10c 15c	3c 3c	15c 15c	2c 2c	10c	2c 2c	10c 10c	1 /B	11/2	3c 3c	15c	4c 4c	20c 20c	2 to 6
1/8 1/4 3/8 1/2 3/4	4c	20c	4c	20c	2c	10c	2c	10c	11/8	11/2	3½c	, 18c	5c	25c	2 to 6
3/4	6c	30c	6c	30c	2½c	13c	2½c	13c	1 3/8	2	4c	20c	6c	30c	21/2 to 6
1	7c	35c	9c	45c	3c	15c	4c	20c	11/2	2	5c	25c	7c	35c	2½ to 6
11/4	10c 13c	50c 65c	12c 15c	60c 75c	4c 5c	20c 25c	5c 6c	25c 30c	1 3%	21/2	7c 8c	35c 40c	9c 12c	45c 60c	3 to 6
2/2	20c	\$1.00	24c	\$1.20	6c	30c	7c	35c	2 74	21/2	11c	55c	16c	80c	3 to 6
21/2	30c	1.50	36c	1.80	13c	65c	15c	75c	21/2	3	20c	\$1.00	25c	\$1.25	3½ to 6
3						\$1.10		\$1.20	2%	3		1.65		2.00	3½ to 6
4	70c	3.50		4.50	37c	1.85	45c	2.25	27/8	4	50c	2.50	65c	3.25	4 to 6
2 1/2 3 1/2	30c 45c 55c	\$1.00 1.50 2.20 2.75	36c 55c 70c	\$1.20 1.80 2.75 3.50	6c 13c 22c	30c 65c \$1.10	7c 15c 24c	35c 75c \$1.20	2 1/2 2 1/2 2 5/8	3 3	11c 20c 33c	\$1.00 1.65	16c 25c 40c	\$1.25 2.00	3 to 6 3½ to 6 3½ to 6

FITTINGS MALLEABLE IRON



Ship. wts. 2 oz. to 21/2 lbs.

Pipe		1 5360 lack	81 H 5361 Galv.			
Size	Ea.	6 for	Ea.			
1/4	3c	15c	4c	20c		
3/8	4c 5c	20c 25c	5c 6c	25c 30c		
72 3/4	7c	35c	8c	40c		
1	8c	40c	11c	55c		
11/4	13c 17c	65c	17c	85c \$1.10		
1 1/2	28c	\$1.40				

Malleable 90° Street Elbows

	State.	size.	1 02.				
Ī	Pipe		1 5352 lack	81 H 5353 Galv.			
ı	Size	Ea.	6 for				
	1/4 3/8 1/2 3/4	4c 5c 6c 8c	20c 25c 30c 40c	5c 6c 7c 10c	25c 30c 35c 50c		
	1 1/4 1/2 2	10c 15c 19c 30c	50c 75c 95c \$1.50	13c	65c \$1.00 1.25 2.15		

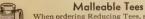


Shipping weights 3 oz. to

Pipe Size	В	1 5362 lack	81 H 5363 Galv.								
Size	Ea.	6 for	Ea.	6 for							
1/4	4c	20c	5c	25c							
72	5c 6c	25c 30c	6c 8c	30c 40c							
3/4	8c	40c	11c	55c							
1	11c	55c	15c	75c							
1/4	17c 21c	85c \$1.05		\$1.05							
2 2	33c		43c	2.15							

Shipping weights 3 oz. to

i	2 168	i. S	itale :	size.			
ľ	Pipe Size		H 5354 lack	81 H 5355 Galv.			
ı	In.		6 for	Ea.	6 for		
ı	1/2 3/4	9c	45c	11c	40c 55c		
	1 1 1/4 1 1/2 2	11c 16c 20c 31c		21c 26c			



When ordering Reducing Tees, state size of largest end opening first, then the other opening governs price. Reduce one size only abranch or at end opening. State size. Not Prepaid.

L'ge	S	traigh				teduci		61	hip.	
End	81 H 5364 81 H 5			1 5365				5358		Wt.
Pipe	Black Ga		alv. Black		Galv.			ach		
Size	Ea.	6 for	Ea.	6 for	Ea.	6 for	Ea.	6 for		4011
1/4	4c	20c	-6c	30c	4c		6c	30c	4	oz.
1/4 3/8 1/2 3/4	5c		7c		5c	25c	7c		4	OZ,
1/2	6c		8c		7c		9c		8	oz.
3/4	9c		12c		9c		12c		12	oz.
1	12c	60c	15c	75c	12c	60c			1	1b.
11/4	18c			\$1.15						lbs.
11/2		\$1.10		1.45	23c	\$1.15	29c	1.45		lbs.
2	30c	1.80	40C	2.30	DOC	1.80	140C	2.30	14 %	IDS.

Malleable Reducers

Size given is the large end. Reduces one size only. Shipping weight 3 ounces to 1½ pounds. Not Prepaid.

Pipe Size...... 1/4 3/6 1/2 3/4 1 11/4 11/2 2 81 H 5370— 3c 3c 4c fic 8c 10c 13c 14c ... 3e 3e 4e 6e 8e 10e 12e 18e ... 15e 15e 20e 30e 40e 50e 60e 90e 81 H 5371— Galvanized... 6 for..... 4c 5c 8c 10c 13c 15c 24c 20c 25c 40c 50c 65c 75c \$1.20



Reduce one size. Ship. wts. 4 oz. to 1 lb. Not Prepaid.

81 H 5390-Black. State size.

Pipe Size ¼ % ½ ¾ 1 1¼ 1½ 2 2½ Each. 2c 2½ c 2½ c 4c 4c 5c 6c 9c 13c 6 for .10c 13c 13c 20c 20c 25c 30c 45c 65c 81 H 5391—Galvanized. Each. 5c 5c 5c 7c 8 c 9c 11c 18c 22c 32c 53c 6 for 25c 25c 25c 25c 40c 45c 55c 90c \$1.10 \$1.60 \$2.65



Malleable Iron Lip Union Washers Included

Not Prepaid. State size

Rubber Washers for Lip Unions Order by size same as above unions. Ship. wt. 1 oz. Not Prepaid. State size, 81 H 5479—Each......2c 6 for......10c



Malleable Iron Unions **Brass Seat Ground Joint**

No washer needed. State size. Ship. wts. 4 oz. to 31/2 lbs. Not Prepaid.

Pipe Black	Galv	Pipe	Diack Gaiv.			dv.
Size Each 6 for 8c 40c 40c 40c 40c 40c 40c 40c 40c 40c 40	Each 6 for 10c 50c 14c 70c 19c 95c	Size 1 1 1/4 1 1/2	24c 36c 42c 52c	6 for \$1.20 1.80 2.10	35c 50c	\$1.75 2.50 3.00



Malleable Pipe Caps

81 H 5373—Galvanized. Each...... 3c 4c 5c 7c 9c 12c 16c 20c 6 for...... 15c 20c 25c 35c 45c 60c 80c \$1.00

81 H 7949-State size. Not Prepaid.

HOW ORDER TO

To find correct size of Pipe and Fittings, be sure to use the scale below. Do not Use a Foot Rule; scale is not in inches. Place end of pipe on scale with one side against line A. Scale reading at opposite side of pipe will show size of the pipe.

If ends of pipe are threaded, they will be slightly smaller than

We ship Pipe in lengths taken at random measuring from 18 to 21 feet, threaded on each end with one coupling. If you order pipe in exact lengths, we will cut and thread them to the length desired, for an extra charge as quoted in tables. We do not include couplings with such specially cut lengths.

Pipe over $6\frac{1}{2}$ feet long shipped Not Prepaid from stock by freight or express. Pipe under $6\frac{1}{2}$ feet Mailable but

Not Prepaid.

How to Order Pipe Fittings

Pipe Fittings are always quoted by the same size as the pipe they fit. For example, a ½-inch pipe takes a ½-inch fitting. Always order the same size pipe and fitting, if used together.

To measure a fitting, lay the edge of a card across center of opening of fitting; and indicate inside diameter by pencil marks. Lay this card on the scale below with one pencil mark at line A. The other pencil mark will indicate the correct size of the fitting.

Do Not Use a Foot Rule. Use the Scale Below.

1/8 1/4 3/8 1/2 3/4 11/4 11/2

For Quality Tools See Ward's Catalog

PLUMBER'S SUPPLIES



Gasoline **Blast Furnace**

Rapid preheating Rapid preheating and generating. May be used as blow torch for thawing frozen pipes, etc. Heavy duty all brass pump and one gallon tank with welded bottom. Uses only gasoline. Ship. wt. 12 lbs. Not Prepaid. 481 H 5197.. \$4.95

Cast Iron Melting Ladle Double lip. Malleable handle. Ship. wts. 1 lb.; 1½ lbs.; 3 lbs. Not Prepaid. 84 H 5200—State diameter. 3-in...20c 4-in...29c 5-in....40e



Asbestos Joint Runner

Galvanized

Pipe Straps

For pouring lead into horizontal soil pipe joints. Strong asbestos fibre, full ¼-inch. Cast iron clamp. Easy to attach—fits close larger of lead leaking out. Ade for pipe from 2 to 6 inches in Shipping weight 2 pounds. Not

89c

Pipe size in., 1/4 3/4 1/2 3/4 1 11/4 11/2 2 Ship, wt. oz., 3 4 5 6 7 8 9 10 Per dozen... 4c 5c 6c 7c 8c 10c 11c 12c





Put up in bars about 61/4 pounds. Prepaid. 81 H 5196—Per bar..... Price subject to market change.

35c Per SOLDER Wiping Solder

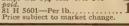
Rope Oakum

For caulking all soil pipe and fittings. Full coil weighs 50 lbs. Ship. wt. 55 lbs. 81 H 5646—Per pound. Not Prepaid.... Per coil. Not Prepaid.



Lead Wool

For calking joints in soil pipe. No melting required. Ship. wt. 1/4 lbs. Not Pre-







Ready to use—easy to apply — assures tight joint. Ship. wt. 11/4 lbs. Not Prepaid.



MontgomeryWard Ho.



HOT WATER . . . at the turn

GALLONS OF HOT WATER PER HOUR

. with No.1 Furnace Oil

WARDS' NEW AUTOMATIC WATER HEATER

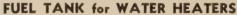


More hot water, for less money, in less time . . . without gas or electricity. Heating capacity enough for large homes or two-flat apartments, but so inexpensive to operate that it is practical and economical for even the smallest family.

This heater is completely automatic. Once you light the pilot, it takes care of itself. It operates on inexpensive No. 1 Furnace Oil (38-40 distillate), range oil, or kerosene, and maintains a tank full of hot water at any See Page 4 temperature you wish between 120 and 160 degrees Fahrenheit. It will heat up to 40 gallons of hot water an hour (80 degrees temperature rise), while burning about \(^{1}\sqrt{3}\) gallon of oil. When the tank is full of hot water, it burns with a low flame,

consuming about 1/8 pint of oil per hour.

Burner is equipped with a demountable firepot for easy cleaning, and a secondary air adjustment that adapts it to a wide range of drafts. The intense, white flame causes very little carbonment that adapts it to a wide range of drafts. The intense, white name causes very little carbon—burners seldom need cleaning. The controls are "Genuine Detroit," by the same manufacturer who makes carburetors for some of America's finest automobiles. The 30-gallon steel tank is hot dip galvanized inside and out, and tested to 300 lbs. for 125 lbs. working pressure. Heavily insulated with 1 inch of flake asbestos. Finished in light green with dark green trim. Water connections for 1-in. pipe; oil connection for ¼-in. pipe or ¼-in. O.D. copper tubing. We recommend that you install a Safety Relief Valve with your heater; see Page 46. Pipe and fittings on Page 43. Shipping Weight 345 lbs. Estimated Freight Charges, Page 3. Shipped from Central Illinois. 281 H 6660-30-gallon capacity. Cash Price...

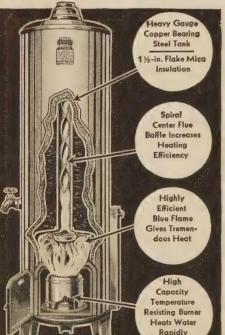




ard by Under-writers' Laboratories, Inc.

Listed as Stand-

Over 100 Gallons of HOT WATER from



I Gallon of KEROSENE with WARDS Windsor AUTOMATIC KEROSENE WATER HEATER

Cash For Easy Payments

See Page 4

Here is an ideal water heater for medium sized homes. It will maintain a tank full of hot water at any temperature you wish up to 180 degrees Fahrenheit, and will heat over 15 gallons of water an hour (80 degrees temperature rise). It burns inexpensive kerosene which is obtainable anywhere, and is entirely automatic in operation. The thermostatic control automatically reduces the flame to a low pilot when the tank is full of hot water, and raises it to a full flame when hot water is withdrawn from the tank and additional hot water is needed. It takes only 5 to 8

See Page 4 minutes for the burner to reach a full flame, compared with the 20 or 30 minutes required by most other blue flame water heaters. The heavy insulation and scientific designing of the flueways of the heater prevent losses of heat through the chimney and give the heater an unusually high operating efficiency.

The burner is of the vaporizing chimney (blue flame) type. Kerosene is admitted to the burner, vaporized to a gas, mixed with the proper amount of air for efficient combustion, and burned with an intensely hot blue flame that is noiseless, odorless, and clean. It is unaffected by draft conditions. The copper bearing steel tank is tested to 300 lbs. pressure for 125 lbs. working pressure. Water connections for \(^3\frac{1}{2}\)-in. pipe; oil connection for the \(^5\)/₁₆-in. copper tubing furnished. We recommend that you install a Safety Relief Valve with your heater; see Page 46. For storage drum and stand see above. Estimated Freight Charges on Page 3 under "Tank Heaters, Water."

181 H 6670—Capacity 22 gallons, for families of 2 to 3. Cash Price.......\$59.00

of a faucet whenever you want it!

Windsor AUTOMATIC GAS WATER HEATER



\$3245 Ccash

\$4 DOWN Balance Monthly See Page 4



Awarded This Seal Because of Outstanding Quality

You'll find the Windsor economical from the start. Because it includes every up-to-date improvement despite the very modest price. Just light the pilot, turn on the gas and then forget about it. It is self regulating, when tank is full of hot water the thermostat turns down flame to save fuel—as water is withdrawn the thermostat turns on full flame assuring you of hot water any hour of the day or

might.

The American Gas Assn. endorses this heater as safe and it bears their label. Should pilot accidentally be extinguished, the Time-O-Stat Safety Pilot Control automatically shuts off gas.

Use Natural or Artificial Gas

Use Natural or Artificial Cos
The Improved Quick Heating Burner uses natural
or artificial gas. The Spiral Central Flue retards
the hot burned gases and adds 300 sq. in. of
heating surface, saving additional fuel. The heavy
copper bearing steel tank is tested to 300 lbs. pressure. It is hot-dip galvanized inside and out and
insulated with heavy air cell asbestos and attractively finished in cream enamel, beige trimmed.

Install It Yourself

Install It Yoursell
The clear, easy-to-follow directions show you
plainly how to make the few necessary connections.
The connections are iron pipe, for water ¾ in.,
for gas ½, in. Easy Payment Plan on Page 4.
Shipped Not Prepaid from Stock in Chicago.
See Estimated Freight Charges on Page 3 under
"Tank Heaters, Water."

Article Number	Capacity of Tank	Diam.—Hght. In.	Shipping Weight	Price
181 H 6115	20 gallons	163/4×503/8	209 pounds	\$32.45
181 H 6116	30 gallons	183/4x549/16	260 pounds	38.50
181 H 6117	40 gallons	18 ³ / ₄ x65	321 pounds	44.45

GAS WATER HEATER

With Double Copper Coils



End View Showing Inner and Outer Coils

Hot water for dishes . . . for the baby bath ... for shaving .. for the baby
... how can you do without it
when as little as \$3.95 brings this

when as little as \$3.95 brings this quick-heating, inexpensive gas water heater into your home.

Besides being very low in price, this heater is very economical in operation—because it is consuming gas only when you want hot water and only for the time needed to heat the water. It does its work very quickly, too. Enough for a shave in ten minutes.

Figure New Yype Rumer

shave in ten minutes.

Efficient New Type Burner
Improved burner gives a blue, intensely hot flame with either natural or artificial gas. And the heavy seamless 3/4-in, double copper coils insure long life.

The jacket and burner are cast iron. Water connections are threaded for 3/4-in, iron pipe. The Gas valve is tapped for 1/2-in, iron pipe. Drip pan catches condensation and dirt.

Keeps your floors clean. 23 inches overall height. Shipping weight 31 pounds. Mailable.

481 H 7822—For range boilers up to 30 gal. capacity.....\$3.95

481 H 7822—For range boilers up to 30 gal. capacity......\$3.95
481 H 7823—For use with Shellane, Rockgas or other bottled petro-

Suited for 30 to 52-gallon range boilers. Height 26¾ inches. Shipping weight 35 pounds. Mailable.

481 H 7818—Complete......\$5.95 481 H 7817—For use with Shellane, Rockgas or other bottled petro-

COAL-BURNING TANK HEATERS

"Hot Water" For a **Bucket of Coal a Day**

Steaming hot water—all you need for just a bucket of coal a day. If your family uses lots of hot water, this is the heater for you. It costs so little to operate.

The firepot is heavy cast iron lined with fire brick to retain heat. The grate is 10 in. in diameter. Height is 2234 inches. Takes 5-inch stove pipe. Tapped for 1 in. iron pipe. Directions for connecting to tank or range boiler. Shipped from Warehouse in Chicago or near Pittsburgh, Pa. 281 H 7883-Capacity 70 gals. Ship. wt. 130 lbs......\$7.50

Plenty of Hot Water for Two Families



EXTRA LARGE SIZE

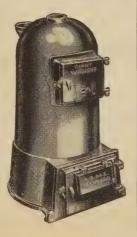
3 Family Size Cap. 200 Gallons

If you want hot water and lots of it, install one of

If you want hot water and lots of it, install one of these extra large coal burning heaters. They cost so little to use that you'd hardly believe it possible.

The full dome, cast iron shell has a water jacket that completely surrounds the firepot right down to the grate level. That means plenty of hot water

Plenty of Hot Water for Four Families



KEROSENE WATER HEATER

Twenty-hours' burning on 1 gallon with a low flame! That's economy for you. And its cleanliness and efficiency will give you another surprise. The neatly designed burner produces a clean, hot blue flame without smoking or smudging.

Also note the coil construction. Seamless copper coils, four of them, to divide the water into small streams for rapid circulation and quick heating. It only requires 20 minutes to heat enough water for shaving and similar purposes. Heats enough water for a bath in a little longer time.

Water connections threaded for 3/4 in. pipe. The cast iron jacket is black japanned. Mailable but Not Prepaid. See Page 4 for Easy Payment Plan. 481 H 7814—Ship. wt. 48 lbs......\$13.50

RANGE BOILER WITH GAS HEATER

Water Heater and Storage Tank in One

Whether you are modernizing your home or building new, you can hardly afford to overlook the economy of this efficient but low priced heater. Just consider some of these outstanding advantages:

It heats a supply of water sufficient for minor requirements in ten minutes—enough for a bath in about 30 minutes. The explanation lies in the large capacity burner and in the riser pipe which is attached to a special heating unit. The flame from the burner is concentrated on this unit. As the water heats it mounts through the riser pipe to the top of the tank. The unusual savings you make are apparent. First in the initial low price; secondly in the lower cost of operation. The extra heavy galvanized steel boiler is tested to 150 pounds pressure and mounted on steel legs of a convenient height. It is also provided with tapped openings so that you may connect it to a coil in your furnace or range if you prefer. The heater burns either natural or manufactured gas but does not burn gasoline. Not Prepaid, See Estimated Freight Charges under "Range Boilers with Heaters" shown on Page 3. State Capacity.

Article No.	Capacity	Ship. Wt.	Height	Diameter	Cash Pric
181 H 6743	12 gal.	74 lbs.	4 ft.	12 in.	\$13.95
	17 gal.	96 lbs.	5 ft.	12 in.	15.95
	25 gal.	123 lbs.	5 ft.	14 in.	16.95



PRESSURE-TESTED RANGE BOILERS Galvanized Inside and Outside

It's Clean Water You Want . . . as Well as Hot Water!

Without

\$45 Hot water will be clean, and rust-free if it comes from one of these range boilers because they're hot-dip galvanized inside and out. \$595 The Boiler pictured at the right is electrically welded—the one at the left is both electrically welded and riveted for even greater strength and longer life. Standard weight boilers are pressure

fittings strength and longer life. Standard Weight Dollers are pressure tested to 150 pounds for 85 pounds working pressure, the extra heavy weight to 250 pounds for 150 pounds working pressure. Boilers with fittings include stand, cold water tube and four 1-in. couplings. Tapped for 3/4-in. pipe. State Size. Shipped Not Prepaid from Chicago Warehouse. Estimated Freight Charges listed under Range Boilers

	Sizes		Electric Welded and Riveted				Electric	Welded		
Cap.	Diam.	Height Inches	Boiler C No Fitt 181 H 6	ings	Boiler V Fittin 181 H 6	gs	Boiler C No Fitt 181 H	ings	Boiler V Fittin 181 H	gs 5719
Ошини	ZMOMCO	ZHOMOO	Ship. Wt.	Price	Ship. Wt.	Price	Ship. Wt.	Price	Ship, Wt.	Price
30 40 52	12 14 16	60 60 60	75 95 115	\$ 6.45 9.15 13.10	87 107 135	\$ 8.55 11.25 16.10	72 92 110	\$ 5.95 8.35 13.25	85 105 130	\$ 8.00 10.45 16.25

Extra Heavy Range Boilers—Tested to 250 Pounds Pressure

sure, we recommend the heavy boilers listed below. Be sure to state the size you wish. Not Prepaid. When the pressure in your hot water system is consistently more than 85 pounds actual working pres-

	Sizes		Electric Welded and Riveted				Electric	Welded		
Cap. Gallons		Height		ngs	Boiler V Fittin 181 H 6	gs	Boiler C No Fitti 181 H 6	ings	Boiler V Fittin 181 H 6	ZS
Ou.ou	- Inches		Ship. Weight	Price	Ship. Weight	Price	Ship. Weight	Price	Ship. Weight	Price
30 40 52	12 14 16	60 60 60	87 107 128	\$ 7.85 10.45 15.75	100 120 150	\$ 9.95 12.55 18.75	85 105 125	\$ 7.35 9.75 14.95	97 117 145	\$ 9.45 11.85 17.95



EVERDUR RANGE BOILER

Rustproof-Leakproof \$2695 S3 DOWN Balance Monthly

Plenty of clean hot water...for bath, kitchen and laundry...when it comes from a rustproof tank of welded

from a rustproof tank of welded EVERDUR.
Made of a rustproof alloy of copper, silicon and manganese that combines the corrosion resistance of copper with the strength of steel.

Most Economical in Long Run Isn't it worth a few dollars more to install an EVERDUR range boiler and be able to completely forget it while it goes on giving the best of service year after year? There are no rust weakened tanks to be replaced with attendant expense, no rust col-



An actual photograph of a typical Ward installation in a house in Glen Ellyn, Ill. A Windsor hot water boiler, a Windsor water softener, a Windsor automatic water heater and an auxiliary water storage tank. An efficient, substantial set-up that is delivering the owner a world of trouble-free service and comfort. And he made a mighty satisfactory saving on each unit.

See Page 3 for Estimated Freight Charges on Range Boilers

Figure the freight charges from table on Page 3 giving rate per 100 pounds for various merchandise for various distances.

RANGE BOILER with JACKET

Without

30-Gallon \$715

Saves Fuel—Saves Money

It doesn't take the asbestos insulated range boiler long to pay for its cost with the fuel that it saves. This fuel saving is accomplished by the heavy ¼-inch thick air cell asbestos jacket. The dead air cells in the jacket itself form a most efficient type of insulation. It holds the heat in the tank where it belongs. The water does not cool so rapidly and requires less fuel to keep it hot. Three brass draw bands and 2 pounds of asbestos cement for cov-2 pounds of asbestos cement for covering top of tank are furnished.

Tank Is Pressure Tested

The heavy gauge steel tank is electrically welded at all seams and galvanized inside and out to prevent rust. Tested up to 150 lbs. pressure; 85 lbs. normal working pressure.

Take advantage of our Easy Payment Budget Plan if you wish. See Page 4. Shipped Not Prepaid from Stock.

181 H 7011—30-Gallon Boiler with Stand Four 3/4-in. couplings and asbestos jacket. Ship. wt. 95 lbs.............\$9.15



30-Gal.

Boiler Covers

Heat the water in the boiler—not the basement. In an unprotected tank hot water loses a large percentage of its heat through radiation. This flexible air-cell asbestos

Size
Size
Size
Size
Size
Size
Size
Sover works much on the same principle as a vacuum to retain the heat. It pays for itself in the fuel that it saves. Easy to install. Three brass draw bands and 2 lbs. of asbestos cement to cover the top of the boiler are furnished. Mailable but Not Prepaid. Include Postage with your order.

481 H 7012—For any 30 gallon, 12 by 60-inch boiler. Ship. wt. 23 lbs. Complete........\$1.95 481 H 7013—For any 40 gallon, 14 by 60-inch boiler. Ship. wt. 25 lbs. Complete.....\$2.25



For water heaters and range boilers. Required by some States as a safety measure. Solid safety measure. Solid brass. Threaded for ½-inch iron pipe. Ship-ping weight 2 pounds. Mailable but Not Prepaid. Include Postage.

81 H 7924..... \$1.95



Couplings 4 for \$ 45

Range boiler gal-vanized couplings for 34-inch iron pipe. Ship. wt. 4½ lbs. Mailable. Not Prepaid. Include Postage. 481 H 6729—Set of 4 ... \$1.45



Drain Valve 29c Brass.
Rough
nickelplated. For



Cast Iron Boiler Stand 40c

For 30 and 40 gallon range boilers. Sturdy cast iron. Height 12 in. Ship. wt. 4½ lbs. Mailable but Not

481 H 6730 40c For 52 gallon boiler. Height 18 in. Ship. wt. 15 lbs. Mailable but Not Prepaid.

481 H 6720.....\$1.35

Pressure Relief Valve \$325



Automatically relieves pressure from overheating. For Range boilers and water heaters. Gives positive protection. No springs, levers or complicated parts. Listed as standard by Underwriters' Laboratories, Inc. Relief valve can be set at 50, 75, 100 or 150 lbs. Easily installed. Directions furnished. Mailable but Not Prepaid.

81 H 5415-Ship, wt. 61/2 lbs ...\$3.25

CLEAR ·· SOFT WATER

. no matter where you live!

The hardest water becomes velvety smooth—soft as rainwater after passing through the Windsor Softener. The mineral inside absorbs all the irritating hardness. No chemical is added. Nothing to wear out. The entire cost of operation is the price of a few pounds of salt used occasionally for flushing.



For DISHWASHING

With soft water the task of dishwashing is lightened. Less soap is required, and no hand roughening chemicals are neces-sary. China and glassware sparkle; and silverware is easily polished. No greasy residue to wipe off.

IMPORTANT

For LAUNDERING-

Only a fraction of the usual amount of soap is necessary with soft water. It forms instantaneous suds that clean. Fine silks and fabrics last longer and retain their luster and original colors. Leaves no soap curds in fabric.



For COOKING



In the BATHROOM-

It gives you the genuine comfort of a real soft water bath. The soap provides a creamy lather for shaving and shampooing. It leaves the hair soft and silky and helps retain the natural beauty of the skin.

Tank Tested to 100 Pounds Pressure

Built to last a lifetime. Heavy tank is 10 gauge steel for the two smaller sizes and 8 gauge steel for larger sizes. All seams are welded. Your choice of a tank that is porcelain enamel lined inside only, or a tank that is galvanized both inside and out. Both tanks are finished outside with an attractive spring Green auto enamel paint trimmed in jet black. If hardness of water is 20 grains (see left) the 20,000 grain size will soften 1000 gallons before salt water flushing (which you can easily do yourself) is necessary. Instructions included. For use only where water pressure is available. Easy Payments on Page 4. Shipped from Chicago, Ill. For Estimated Freight Charges See Water Softeners on Page 3.

Cap.	Tank	Ship.	Article	Porc. Enam.	Article	Galv. In-
Grains	Size, In.	Wt.Lbs.	Number	Inside Only	Number	side and Out
20,000	12 by 48	310	281 H 8278	\$67.95	281 H 8275	\$54.75
40,000	16 by 48	475	281 H 8279	99.50	281 H 8276	86.50
60,000	18 by 48	650	281 H 8280	135.00	281 H 8277	109.00





Plentiful Supply of HOT WATER

- COAL BURNING TANK HEATER
- 30 GALLON RANGE BOILER With Insulating Jacket and Stand

• PIPE and FITTINGS as Follows:

8 feet of 1-inch Galvanized Pipe. 8 feet of 1-inch Galvanized Pipe. Four 1-inch Galvanized Elbows Two 1-inch Galvanized Unions Three 1-inch Galvanized Nipples Two 3/-inch Galvanized Boiler Supply Fittings One 1/2-inch Cold Water Tube 8 feet of 5-inch Smokepipe One 5-inch Elbow One 1/2-inch Boiler Drain Valve One 1x1/2-inch Galvanized Bushing.

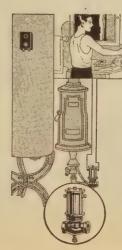
This economical Outfit solves your hot water problem for all times. The 70-gallon capacity tank heater furnishes ample supply of hot water for a large family for about a bucket full of coal per day. Used with the 30-gallon insulated storage Range Boiler it assures you of an ample supply of steaming hot water for bathing, laundering, dishwashing and all household needs. It comes complete with 8 feet of smokepipe and one elbow, range boiler stand, and all necessary pipe and fittings for the ordinary connection of the heater to boiler—all at this one low price. Instructions for installing included. Tank heater is 22% in. high—it is our number 281 H 7883 described in detail on page 45. The 30-gallon range boiler is galvanized inside and out and is furnished with three-quarter inch thick air cell asbestos jacket which keeps water in the tank hot for a longer period of time—it is our number 181 H 7011 fully described on page 46. Heater shipped from Factory in Chicago or Eastern Pa. Boiler cover fittings etc., shipped from Stock.

PORTABLE WATER SOFTENER

Here is one of the handiest little softeners you have ever seen. Simply fasten the supply hose to any faucet—hot or cold—and you get soft water. Same principle as larger softeners. The mineral will soften water for years. All that you have to do is to flush it daily or as required with common table salt. 400-grain capacity, steel tank. Height 12 in. Beautiful green crackle lacquer finish. Instructions included. Shipping weight 9 pounds. Shipping weight 9 pounds. 481 H 8270—Complete with hose. \$585



Electric UPSTAIRS CONTROL FOR GAS WATER HEATERS



Saves Gas . .

Saves Steps

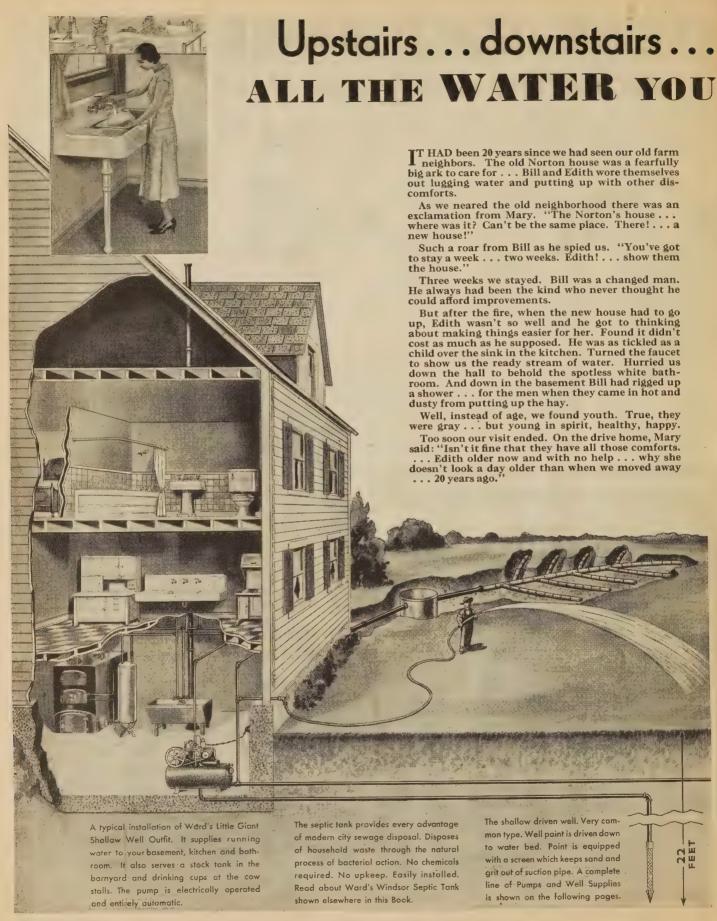
Turn on the water heater from a switch button in the bath-room or kitchen. No need to go down to the basement every time you want hot water. Save steps, work and wory with this easily installed upstairs control.

worry with this easily installed upstairs control.

Electric switches may be located at as many convenient points as desired (two switches furnished). When you push the button an automatic valve turns on the heater, and a red Bull's-Eye warning light indicates that the heater is on. You shut it off the same way . . . and if you forget, a thermostatic limit switch turns off the gas when the water gets hot. It is absolutely fool-proof . . water cannot overheat nor can gas be wasted.

Device operates on low voltage from a good door bell transformer. All wiring may be done with ordinary bell wire. Equipment includes electric gas control valve, thermostatic limit switch, two switches with Bull's-Eye warning signals and pilot light assembly. For 110 to 120 volt A.C. current.

Mailable. Not Prepaid. Ship. wt. 6 lbs. \$10.45



in the yard...in the barn CAN USE AT A FEW CENTS A DAY

THE WATER supply outfit you require depends entirely on the demands you will make upon it. With the facts in the table below at the right one can estimate quickly the water requirements of any home whether in the city or on the farm. Your well should be tested by actual pumping to learn definitely how much water can be drawn in a given time. It would be a mistake, of course, to use a 250-gallon pump on a 150-gallon well.

By far the most successful method today of supplying running water under pressure is the electrically operated system. It is entirely automatic, operating from an electric power line or 32-volt system with no more attention than a periodical oiling. Where electric power is not available the semi-automatic system operated with a gas engine is an ideal solution. It is very economical and surprisingly simple to operate.

The Shallow Well Pump

Is used only where the vertical lift is 22 feet or less. It draws water by suction and need not be placed directly over the well. This makes it possible to locate the pump in the basement or some other protected place. The distance from pump to well will vary according to the vertical lift and size of pipe used. With every pump we supply information on the maximum horizontal distance that a pump will draw water from a 22 ft. vertical lift.

The Deep Well Pump

The difference between a Deep Well Pump and a Shallow Well Pump is that the power unit and pump head must be directly over the well and the cylinder submerged in the water at all times. Also, the Deep Well Pump must be used when it is necessary to lift water from a depth greater than 22 feet.

The Ward Water Supply Systems

On the pages following are shown Ward's pumping outfits and installation equipment. There is everything needed for any type

of system. The outfits offered supply complete service in the house and an ample supply for service at the barn, sprinkling the lawn, washing the car, etc.

Ward's Little Giant Shallow Well outfit is one of the most efficient, quiet running outfits on the market. This simple system supplies all the conveniences of city water service at much lower cost. Likewise Ward's Deep Well Outfits represent the latest in deep well pump design and are sturdily constructed for a lifetime of heavy service.

FREE Engineering Service

To determine the size pumping outfit that will best meet your requirements and to help you plan the system, Ward's maintains an Engineering and Information Department whose service is absolutely Free. Complete plans for installation, if required, are provided. Write and tell us your problem. Just address the Engineering and Information Dept., Montgomery Ward & Co.

It will save time if you will supply the following information:

- a. Distance from ground to water level.
- b. Distance from pump to water supply.
- c. Height above ground water is to be pumped.
- d. Distance from pump to point of delivery.
- e. Approximate amount of water needed.
- f. Kind of power to be used.
 g. If power is already available, give horsepower, revolutions per minute and diameter of shaft or pulley.
- h. Furnish a rough sketch with measurements showing location of pump, water supply and point of discharge.

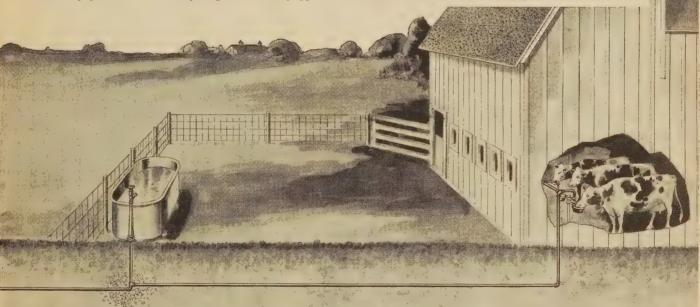
AVERAGE WATER REQUIREMENTS PER UNIT PER DAY

 Gal.
 Gal.

 Person—with bathroom 25
 Horse
 10

 Person—no bathroom 12
 Hog
 2

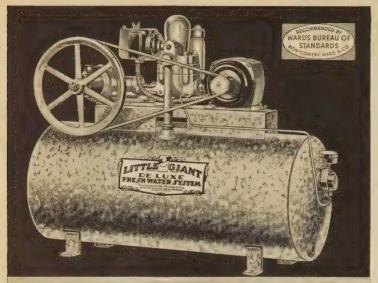
 Cow
 12
 Sheep
 1



An outside anti-freeze hydrant supplies water to the stock tank. A brass shut-off valve at the service pipe below is controlled by a hand wheel at the top of the hydrant. When valve is closed, the water drains out below frost line.

Drinking cups at the cow stalls are a sure source of profit. It is universally agreed that cows increase their productive capacity when water is easily accessible at all times. See our general Catalog for Dairy Supplies and Stock Tanks.

AUTOMATIC SHALLOW WELL



Ward's LITTLE GIANT De Luxe

Completely automatic. Starts by itself-stops by itself . . . Automatic Air Volume Control. Maintains proper amount of air in tank at all times . . . Timken Roller Bearings. Easier running—less wear... Overload Switch. Protects motor against overloading.



Our best Shallow Well Water System, and a better built, more efficient outfit, no one would ever need. It is equipped with everything for continuous, trouble-free, automatic service of the very highest type. Quiet running, powerful, economical ... costs only a few cents a day to operate.

A tank of 30 gallon capacity holds an ample supply of water; the supply is replenished quickly and automatically. The pump cylinder is a larger size, capable of pumping more water at slower speed. Large waterways permit free, swift water travel . . . as a result the pump action is unusually quiet.

The special equipment and features, listed under the illustration, insure fine service and long life from every De Luxe outfit. Water is forced into the house service pipes at about city water pressure. The pump will draw water to any distance within 100 feet of the water source, where the vertical lift is not over 22 feet. The 250-gallon per hour size delivers ample water for the average family.

FRESH WATER VALVE Gives Water Direct from Well galvanized both inside and outside. Tested to 150 pounds. Will not discolor water. Accessible Strainer—Located in pump air chamber—easily removed for cleaning. Fresh Water, Foot and Relief Valves In-

Fully Automatic—Pump starts when four gallons of water have been drawn, or when pressure drops to 20 pounds. Stops at 40 pounds. Adjustable to 65 pounds if water must be forced more than 40 feet above tank.

must be forced more than 40 feet above tank.

Double Action Pump—High efficiency reciprocating type. Pumps air and water at same time, maintaining 25 per cent air at 40 lbs. pressure. Never necessary to remove cap from air valve to replenish air supply.

Repulsion-Induction Motor—Nationally famous make, a type specially recommended for our automatic systems.

Stainless Steel Piston Rod—Easily accessible double intake valves—Accurate pressure gauge—Silent V-Belt.

30-Gal. Capacity Steel Tank—Heavily Shipped Not Prepaid from Factory in Springfield, III. See Estimated Freight Charges on Page 3 under "Pumping Plants, Water." Ship. wts. 200 and 250 lbs.

250 Gallons per Hour Size; 1/4-Horse Power Motor

281 H 3400—110 to 120-Volt, 60-Cycle A.C.

281 H 3401—32-Volt, Farm Current.

Cash Price ment Price ment Price 52.50 \$59.00

500 Gallons per Hour Size; 1/3-Horse Power Motor

Ward's LITTLE GIANT Standard

Completely Automatic... Repulsion-Induction Motor - Powerful . . . Automatic Air Volume Control ... Ball Bearing Crankshaft Grease-sealed... Reciprocating Piston-Type Pump.



An automatic outfit equally as dependable as the Little Giant De Luxe described at the left, except that we have eliminated a few of the refinements of the De Luxe system to help you cut the cost of installing this wonderful modern convenience. The 250gallon size is equipped with an 18 gallon tank which stores enough water for pressure and immediate needs. You get all the power, sturdiness and efficiency required for years of satisfactory service . . . at the same time the price you pay is very low.

Do you realize that you can put this outfit in your home for a down payment of only \$5 and monthly payments of only \$5:50? At so small a cost there can't be any reason in the world for doing without running water in the home.

Completely automatic and requires no attention save an occasional oiling. Starts by itself at the withdrawal of 3 gallons of water. Stops when tank pressure reaches 40 lbs. Adjustable to 60 lbs, when additional pressure is necessary. Equipped with foot and relief valves. For wells up to 22 feet deep.

250 Gallons Per Hour Size Supplies Ample Water for Average Family

Quarter horsepower motor. 18-gallon steel tank, galvanized inside and outside, and tested to 150 pounds. Only two connections, both for 3/-inch pipe. Size 39 by 13 by 261/2, inches high. Easy Payments—Only \$5 with order, see Page 4. Shipping weight 150 pounds. Shipped Not Prepaid from Factory in Springfield, III. See Estimated Freight Charges on Page 3 under "Pumping Plants, Water."

Easy Payments 281 H 3425—110 to 120-Volt, 60-Cycle A.C.... 281 H 3426—32-Volt, Farm Current.... 281 H 3427—110-Volt, 25-Cycle A.C....

450 Gallons Per Hour Size When a Greater Volume of Water is Required

One-third horsepower motor. 30-gallon heavy steel tank, galvanized inside and outside and tested to 150 pounds pressure. Only two connections, both for 1-inch pipe. Size 39 by 17 by 30 inches high. Shipping weight 220 pounds. Shipped Not Prepaid from Factory in Springfield, Ill. See Estimated Freight Charges on Page 3 under "Water Pumping Plants."

Cash Price Easy Payments , \$68.50 \$75.00 , 68.50 75.00 281 H 3430—110 or 220-Volt, 60-Cycle A.C. \$68.50 281 H 3431—32-Volt, Farm Current 68.50 281 H 3432—110-Volt, 25-Cycle A.C. 73.45

PUMPS cost less at WARD'S



Ward's CASCADE Automatic

Same Reciprocating Piston-Type Pump as on **Higher Priced Outfits**

Completely Automatic ... Powerful Repulsion-Induction Motor ... You save at least \$10.

Cash Price

If you have thought you couldn't afford to install running water in your home, look at this. Here's a Shallow Well Outfit, built to last a lifetime, automatic, efficient and economical. A small down payment of \$4 will put it on your property. (See Easy Payments, Page 4.) Then you can enjoy all the advantages of running water immediately, paying the balance of the cost a little at a time. The only additional expense is the power, which should not cost you more than about 2 cents a day. Installation of the outfit is very simple. We furnish easy-to-follow instructions.

The Cascade has a pumping capacity of 250 gallons per hour. The 15 gallon tank stores enough for pressure and immediate needs. Compressed air forces a steady supply into your house supply pipes from any well 22 feet deep or less. The flow of water is constantly maintained at average city water pressure, assuring you of an abundant flow every time the faucet is turned on.

A Quality Built Water System

In this low priced outfit we have installed the reciprocating piston type unit—and that's something very unusual in outfits priced so low. Any good engineer prefers the reciprocating piston type pump to the rotary pump. We have also used the same repulsion-induction motor that is furnished with our best outfit. Splash lubrication and long life bronze bearings mean smooth, quiet operation over a long span of years.

Motor is ¼ horsepower. Size of outfit, 33 by 13 by $26\frac{1}{2}$ inches high. Two connections, both for ¾-inch pipe. Foot and relief valves are included. Ship. wt. 150 lbs. Shipped Not Prepaid from Factory in Springfield, Ill.

For Estimated Freight Charges see Page 3 under "Pumping Plants.

250 Gallons Per Hour Capacity

281 H 3415—110 to 120 Volt, 60-Cycle A.C.....\$37.95 281 H 3416-32-Volt, D.C. Farm Current...... 38.95



Same powerful Repulsion Induction
Type Motor and Reciprocating Pump Head as furnished with Little Giant Standard Outfit on opposite page. Hook it up to any size tank,



It is often necessary to have in storage a larger supply of water than is possible in the tanks furnished with the complete outfits. Also, you may have a storage tank of your own on hand. Therefore, we are offering this separate unit consisting only of motor, pump, automatic pressure switch and foot valve. Hook it up to your own tank or select the special size you require from those shown on Page 54 of this catalog. The pump is entirely automatic, starting and stopping by itself.

Pumps water from wells 22 feet deep or less.

Fresh Water Valve 81 H 3147, listed on Page 54, can be used with this pump. Two connections, both for 3/4-inch pipe. Purchase on Easy Payments if you prefer—see Page 4.

Shipped Not Prepaid from Factory in Springfield, III. For Estimated Freight Charges see Page 3 under "Pumps,

250 Gallons-Per-Hour Size

450 Gallons-Per-Hour Size

One-third horse-power motor, 110 or 220-Volt alternating current. Size 26½ by 12½ by 16 inches high. Foot and Relief Valve included. 281 H 3434—Shipping wt. 100 lbs. \$62.45

PORTABLE CENTRIFUGAL PUMP

This powerful, centrifugal Pump has a capacity of 1800 gallons per hour at a 38-foot head. Used extensively for garden irrigation, draining ditches, excavations, etc. Portable—compact. Easily transported by two men. Maximum total suction lift must not exceed 20 feet.

Outfit consists of our large capacity Centrifugal Pump (181 H 5964—one-inch size described on Page 53) but with special pulley and Ward's Famous Air Cooled 1½-H.P. Sattley Gasoline Engine. Pump and Engine mounted on strong steel base. Complete with two high quality V-type drive belts.

For suction hose see Ward's General Catalog.

Ship, wt. 145 lbs. Shipped Not Prepaid from Stock. For Estimated Freight Charges see Page 3 under "Pumps, Power."

181 H 8230—Price—complete......\$72.50



ELECTRIC CELLAR

For leaky excavation work or where laundry tubs, drains, etc., are installed below sewer level. Entirely automatic. Made entirely of imperishable bronze... one of the reasons that make it just about the finest Sump Pump we have ever seen. Pump casing, base and strainer are all rust-proof bronze. Tobin Bronze Impeller Shaft. The 1/4-H.P. Repulsion Induction type Motor is a nationally known make.

Cash

This Pump is Very Simple to Install



AUTOMATIC CELLAR PUMP

Automatically drains water from cellars, pits and small exca-

vations.

Excellent where seepage continually dampens your basement. For use only in sections where average city water pressure is available.

Complete



you've ever used a WA



Hand Operated Force Pump

4-Ft. Set Length

Smooth, easy acting with a volume of water with every Smooth, easy acting with a volume of water with every stroke. Just the pump you need for filling your stock tanks. Also tapped for pumping to overhead storage tanks. Sprinkling hose connection furnished. Extra heavy cast iron standard, painted green; drip hole above cylinder to prevent freezing; 6-inch stroke and many other features. Your choice of cylinders; iron with brass valve seat—brass-lined with brass cage and brass valve seat. Extra Quality Pump Leathers good for about 4 years' service. Read "How to Order" on next page. Not Prepaid. See page 3 for estimated Freight Charges on Hand Pumps.

Pumps Complete With 4-Ft. Galvanized Set Length and Cylinders for Wells Up to 30 Feet

Article Number	Size of Cylinder Inches	Size Pipe In.	Ship. Wt. Lbs.	With Iron Cylinder	Brass Lined Cylinder
181 H 5811	3 by 10	1 1/4 1 1/2 2	85	\$8.25	\$9.45
181 H 5812	3½ by 10		89	9.25	10.45
181 H 5813	4 by 10		96	10.25	11.45

Pump Standard Only

For wells up to 100 ft. deep. Set length or cylinder not included.
Tapped for 1½, 1½ and 2-inch suction pipe. State state tapping.
Ship. wt. 651bs. For Est. Frt. Chgs. see "Hand Pumps" on

Page 3.
181 H 5862—Not Prepaid\$5.45



Windmill Top Force Pump

4-Ft. Set Length

A three-purpose, anti-freeze pump. Can be operated by hand, windmill, or pump jack. Back of pump is tapped for 1½-inch iron pipe so that water can be forced into overhead tanks. Green finished cast iron standard with cock spout and hose connection. Drip hole above cylinder prevents freezing. Six-inch stroke. Iron cylinder has brass valve seat. Brass lined cylinder has brass cage and brass valve seat to prevent rust and corrosion. Extra Quality Pump Leathers good for about 4 years' service.

Read "How to Order" on op-posite page. Not Prepaid. For Estimated Freight Charges on Hand Pumps, see Page 3

Pumps Complete With 4-Ft. Galvanized Set Length and Cylinders for Wells Up to 30 Feet

	-				
Article Number	Size of Cylinder Inches	Pipe Size Inches	Ship. Wt. Lbs.	With Iron Cylinder	Brass Lined Cylinder
181 H 5832 181 H 5833 181 H 5834	3 by 10 3½ by 10 4 by 10	11/4	80 90 100	\$9.95 10.45 11.45	\$11.25 11.75 12.95

Pump Standard only. Without set length or cylinder. For wells up to 100 feet. Tapped for 1¼, 1½, or 2-inch suction pipe. State state tappings. For Est. Frt. Charges, See "Hand Pumps," Page 3.

181 H 5863—Ship. weight 110 lbs......\$11.45



Hand Operated Lift Pump

4-Ft. Set Length

Heavy cast iron standard in a deep green finish. Drip hole above cylinder prevents freezing. Six-inch stroke. Iron cylinder has brass valve seat. Brass lined cylinder has brass valve seat. Brass lined cylinder has brass cage and brass valve seat. Built of heavy material, for hard continuous usage. Extra quality Pump Leathers good for about 4 years. Pump Standards Only Without set length or cylinder. For wells up to 30 feet deep. Tapped for 11/4-inch pipe only. Ship. wt. 34 lbs. Not Prepaid. 181 H 5840—Standard ... \$2.75 Extra Heavy Standard Only Without set length or cylinders. For wells up to 60 feet deep. Tapped for 11/4, 11/2, or 2-inch pipe. State size of tappings. Ship, wt. 41 lbs. Not Prepaid. 181 H 5848—Standard ... \$4.25 th 4-Ft. Galvanized Set Length

Pump Complete With 4-Ft. Galvanized Set Length and Cylinders for Wells Up to 30 Feet

Article Number	Cylinder Inches	Pipe In.	Wt. Lbs.	Iron Cylinder	Lined Cylinder
181 H 5799 181 H 5800	2½ by 10 3 by 10	11/4	56 59	\$4.45 4.75	\$5.45 5.75
1	Extra Heav	y Set L	ength	Pumps	
Article	Cylinder	Pipe	Ship. Wt.	With	Brass Lined

FOR EASY PAYMENTS SEE WARD'S BUDGET PLAN ON PAGE FOUR

PUMP SUPPLIES ... Save Time and Money by Ordering from Ward's

BRASS WELL CYLINDER

Silent. Tested for 450 lbs. working pressure. Two cup type friction-proof leathers good for about 4 years. Check valves in plunger and bottom of cylinder. Open type, illustrated, fastens on bottom of drop pipe inside well casing 3 inches in diameter and larger.

Working parts removable without pulling drop pipe. Use ½-inch pipe for pump rod. Fits inside casings one inch larger than "Top" size. Ship. wts. 4, 6, 8 lbs. Mailable. Not Prepaid.

Article	Size	For Pi	pe Size	Cash
Number	Inches	Top Size	Bottom	Price
581 H 3155	1% by 10	1½-in.	1 -in.	\$5.95
581 H 3156	113/16 by 10	2 -in.	1 1/4 -in.	6.95 10.95
581 H 3154	21/4 by 10	$2\frac{1}{2}$ -in.	1½-in.	10.93

Closed type has general appearance of cylinder shown. For driven wells where pipe is not less than 2 inches in diameter. Use 7/15-inch pump rod. Ship. wts. 4, 6, 8 lbs. Mailable but Not Prepaid.

Article No.	Size, Inches	For Drop Pipe	
581 H 3160	1 % by 10 1 3/6 by 10	1 -in.	\$5.95
581 H 3161 581 H 3163	1 ¹³ / ₁₆ by 10 2 ¹ / ₄ by 10*	1 -in. 11/4-in.	6.45 6.95

*Will fit inside 21/2-inch casing.

IRON WELL CYLINDER

Ward's cylinders are furnished with brass valve seats to resist corrosion. Brass lined cylinders also have brass cage. For hand use, and smoothness and ease of operation we recommend the 2½ to 3-inch for wells 55 to 100 feet deep. 6-inch stroke in 10-inch size; 10-inch stroke in 16-inch size. Cylinders up to 3 inches in diameter are tapped for 1½-inch iron pipe, 3½-inch diameter for 1½-inch pipe, and 4-inch diameter for 2-inch iron pipe. Single leather plunger on 10-inch size, and 16-inch cylinders have a double leather plunger good for about 4 years. Shipping weights: 14 to 18 lbs. Mailable but Not Prepaid. Include postage with your order. State size wanted. May be bought on Easy Payments—see Ward's Budget Plan on Page 4. Ward's cylinders are furnished with brass valve seats to

481 H 5956—Iron Cylinders. The inside is ground smooth and polished. Brass valve seat.

Bore In.	10-In.	16-In.
21/2	\$1.50	\$2.00
3 3 16	1.60	2.15
4/2	2.25	3.85

481 H 5957—Iron body. Polished brass lining, iron caps.

Brass cage and	vaive seat.
10-In.	16-In.
\$2.19	\$2.79
2.29	3.29 3.49
4.25	5.25

PUMP RODS

About 18-foot lengths (not threaded). Diam. of rod, 7/1s-inch. Add 5 cents extra for each end you want threaded. Ship. wt. 100 feet, 52 lbs. Est. Freight Charges page 3 under Pump Parts.

181 H 6036—Not Mailable. Not Pre-

181 H 6041—Pump Rod Couplings. For 7/16-inch rod. Ship. wt. 4 oz. Mailable but Not Prepaid.

DRIVE WELL POINTS

Galvanized. Rectangular holes. Brass jacket, carbon steel point. State size

Diam.	Length	Ship.	481 H 5990	481 H 5991
Pipe	Overall	Wt.	No. 60 Gauge	No.100 Gauge
1 ¼ -in.	30 in.	6 lbs.	\$1.49	\$3.15
1 ¼ -in.	36 in.	6 lbs.	1.89	3.98
1 /4 -in.	42 in.	6 lbs.	2.29	4.75
1 /4 -in.	48 in.	6 lbs.	2.80	5.55
1½-in.	36 in.	7 lbs.	2.50	4.75
1½-in.	42 in.	7 lbs.	2.90	5.60
2 -in.	42 in.	13 lbs.	4.25	7.35
2 -in.	54 in.	15 lbs.	5.35	9.55

Prepaid.

with your order 81 H 6000-State size.

Size

1¼-inch 1½-inch 2 -inch 2½-inch 3 -inch 4 -inch

Well Pipe Holder



Holds pipe sections while making connections. Adjustable to hold 1, 1½, 1½ and 2-inch pipe. Ship. wt. 35 lbs. Not Mailable. Not Prepaid.

181 H 6052.....\$2.95

Pump Cylinder Cup Leathers



The size given is inside diameter of cylinder. Ship. wt. 3 to 16 oz.

State size wanted. 81 H 5984

0						
Size	Each					
134-inch 2 -inch 21/4-inch 21/2-inch 234-inch 3 -inch 3/2-inch 4 -inch	6c					
2 -inch	8c 9c					
21/4-Inch	11c					
2¾-inch	12c					
3 -inch	14c					
3½-inch	21c 30c					
41%-inch	35c					
4½-inch 5 -inch	40c					

SAFETY CISTERN COVER



18-Inch Cover

Keep cisterns covered with Ward's Safety Cistern Covers. Built of heavy cast iron. Complete with frame. Lid bolts down. Ship. wts. 40 and 50 lbs. Not Mailable. Not Prepaid. For Estimated Freight Charges see Page 3.
181 H 6139—For 18-inch openings.

\$2.75 181 H 6140—For 20-inch openings.

Iron Drive Caps



order. Ship. wt. 1½, 2, and 2¾ lbs.
81 H 5995—State

size wanted.	
Iron Pipe Size	Each
1½-inch 1½-inch	30c 36c
2 -inch	65c

Spaut Attachment

Fits any Fits any regulation size spout. Ship. wt. 4½ 1bs. Mailable but Not Include Postage with your order.

with your order. 81 H 5890-For 1 1/4-in. pipe.....40c 81 H 5891—For

1 1/2-in. pipe.....45c

Check Valve Leathers

Foot Valve and Strainer

Holds prime in pump. Shipping weight 3 to 17 pounds. Mailable but Not Include Postage

Inside diameter is cylinder size. Order by inside diameter. Ship. wts. 2 to 8 oz.

81 H 5985

Inside	Outside	Each
2 -in.	2½-in.	бс
21/4-in.	2¾-in.	7c
2½-in.	3 -in.	8c 9c
2%-in. 3 -in.	3 /4 -in.	10c
31/2-in.	4 -in.	13c
4 -in.	41/2-in.	18c

you know how GOOD they really are

HOW TO ORDER PUMPS

IN THE description of each pump we state the depth of well the pump will serve—the depth being the distance between the pump platform and the lowest water level in dry seasons. Any of the pumps listed on this or the opposite page are suitable for shallow wells, where distance from pump platform to water is 22 feet or less. Our set length pumps are also designed for deeper wells where distance from pump platform to water is greater than 22 feet.

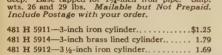
In set length pumps we attach the cylinder on the drop pipe 4 feet below the base of the pump for use in wells not over 30 feet deep. Additional pipe of correct size should be ordered to reach from cylinder to a point at least 6 inches below the lowest water level. If well is over 30 feet deep order enough pipe and pump rod to lower cylinder into water sufficiently deep to keep cylinder submerged even in dry seasons. For wells over 100 feet deep order our extra heavy pump standard. Lift pumps will draw water only to the pump spout. When it is desired to force water to an elevated storage tank or pressure tank order a force pump.

Our Engineering and Information Department will furnish you with any additional information on Pumps and Water Systems you may want. Write them—this service is free.

For Easy Payment Budget Plan See Page 4

PITCHER SPOUT LIFT PUMP

Think of the convenience of having a pump in your kitchen. No more carrying water from the outside, summer or winter. No pails of water standing around and becoming warm and brackish. This pump is as much a necessity in your home as a cooking range. Made of heavy iron with adjustable head with set screw so handle can be turned in any direction. For wells or cisterns up to 20 feet deep. Base tapped for 11/4-inch iron pipe. Ship, wts. 26 and 29 lbs. Mailable but Not Prepaid. Include Postage with your order.



481 H 5917-31/2-inch brass lined cylinder.... 2.15



HYDRAULIC RAM

Send for Free Book

Simple and economical to operate. Automatic . . . it's always on the job. Uses power supplied by weight and flow of water to pump a part of it higher than its source. Easy Payments on Page 4.

Shipped Not Prepaid. Est. Frt. Charges, see Rams on Page 3. Write for Free Book on Rams—it tells how to figure the size Ram you need and fully describes its operation and many advantages.

181 H 5950-State size wanted.

Size Gallons Water per		Size Pipe	Required	Shipping	Cash
Size	Minute to Operate	Supply	Discharge	Weight	Price
2	1 to 2	¾-inch	½-inch	30 lbs.	\$10.95
3	2 to 4	1 -inch	½-inch	36 lbs.	12.85
5	3 to 7 6 to 14	1½-inch 2 -inch	¾-inch 1 -inch	42 lbs. 52 lbs.	16.75 19.95

ROTARY PUMP

Constructed of cast iron. For use where suction lift is not over 20 feet. Forces water 100 feet above pump. Tight and loose pulleys. One-piece cam case, with removable front plate. Will not pump gasoline. Write us for prices and descriptions of gasoline fitted pumps. Shipping weights: 90, 110, and 165 pounds. Not Prepaid. See Estimated Freight Charges on Page 3 under Power Pumps.



HAND-POWER WATER SYSTEM

LIFTS WATER FROM 20 FEET-FORCES IT AS HIGH AS 60 FEET

Have running water in your home from wells, cisterns, lakes, or streams where lift is not over 20 feet, and horizontal distance to water not over 200 feet. Air and water pumped at the same time. Tank is tested to 75 lbs. working pressure. Pump has 3-inch brass lined cylinder with 5-inch stroke. 1½-inch suction pipe. Outfit includes pump, tank, water gauge, pressure gauge, drain cock, and all valves and fittings to connect pump to tank.

Pipe connection to pumping fixtures, threaded ¾-inch. Pump and fittings Shipped Not Prepaid from Stock. Tank Shipped Not Prepaid from warehouse in Chicago. Estimated Freight Charges on Page 3 under Hand Pumps.

Size Tank Feet	Cap. Gal.	Ship. Wt. Lbs.	Outfit With Black Painted Tank	Price	Outfit With Galvanized Tank	Cash Price
2 x6	140	325	181 H 8220	\$32.95	181 H 8221	\$35.95
2 x6	220	490	181 H 8220	43.50	181 H 8221	52.75
3 x6	315	605	181 H 8220	55.95	181 H 8221	65.95

Payments See Page 4

Easy

Horizontal Force Pump

Pump only, same as shown in above outfit. With 1½-inch suction and one-inch discharge opening. Air attachment can be had for pumping air with water. Ship. wts. 86 and 85 lbs. Not Prepaid. See Est. Freight Charges on Page 3.

181 H 5939-Horizontal Force Pump with

air attachment.
Each \$11.95
181 H 5936—Horizontal Force Pump without air attachment. Each\$10.95

CENTRIFUGAL PUMP-Use with Engine or Tractor

For irrigating; for draining swamps and ditches and for filling large overhead tanks. Handles a large volume of water where suction lift is not over 20 ft. Bearings are all bronze. Outboard bearing is ring oiled. Extra long packing gland with grease cup. Pumps with 2½-inch discharge openings or larger have flanged openings. Smaller sizes have suction and discharge tapped for pipe connections. Send these specifications with order: horizontal length, and vertical height of suction and discharge pipes; motor or engine size, speed and pulley size. Not Prepaid from Michigan City, Ind. Est. Frgt. Charges on Page 3 under Power Pumps. State size.



Dis- charge	Suction	Capacity Gal. per Minute	Horse-pow- er 40-Ft. Head	Speed R.P.M. 40-Ft. Hd.	Diam. and Face of Pulley	Ship. Wt. Lbs.	281 H 5964
3/4 -in. 1 /2 -in. 2 /-in. 2 /2 -in. 3 -in. 4 -in. 5 -in. 6 -in.	1 -in.	5- 20	3/4	1856	3¾ by 4 in.	42	\$ 11.35
	1 ¼-in.	20- 35	1	1836	3¾ by 4 in.	45	12.65
	2 -in.	40- 80	2	1888	4 by 4 in.	65	19.95
	2 ½-in.	100- 160	4	1660	4 by 4 in.	85	24.95
	3 -in.	180- 260	6	1468	6 by 6 in.	175	42.95
	4 -in.	280- 340	9	1325	7 by 6 in.	210	55.00
	5 -in.	460- 650	12	1100	8 by 8 in.	340	73.50
	6 -in.	700- 850	15	1018	9 by 10 in.	510	84.50
	8 -in.	900-1400	20	1040	10 by 10 in.	520	105.00

THRESHER TANK PUMP

Pumps 2000 Gallons \$995

per Hour

Capacity 2000 gallons per hour. Fills tanks, empties cesspools, etc. where suction lift is not more than 22 ft. Made of high quality materials. 5-in. smooth iron cylinder with 5-inch stroke. With strainer. Adjustable discharge turret head tapped for 2-in. iron pipe. 2-in. suction with 2-in. hose connection. Ship. wt. 75 lbs.

75 lbs. 181 H 5927—Iron cylinder, polished \$9.95

BARREL

Pumps gasoline, oil, syrup, or other liquids out of barrels. Used for filling gasoline tanks on tractors, cars, etc. on tractors, cars, etc.
Hand Rotary type.
Pumps 13 gallons per
minute. Forces liquid
15 to 20 feet above
pump. Strongly made
of iron with 3-foot discharge hose and roses.



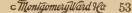
suction pipe and for one-inen pipe for pumping to tank, etc. Plain spout with standard hose thread. Ship. wts. 22 and 24 lbs. Mailable but Not Pre-paid. Include Postage with your order. 481 H 5916—With 481 H 5916—With plain spout. \$3.95 481 H 5915—Same as above, but with brass faucet spout for 34-inch hose connection \$4.45



WELL BORER

Bores wells up to 25 feet deep and 8 to 14 inches in diameter. Just what you need to dig through sand, need to dig through sand, sticky clay, mud, and gravel with the minimum of effort. Handy for digging post or foundation holes. Can also be used under water. Hardwood handle. Adjustable blade. Has iron pipe extension giving total length of 25 feet. You will find many uses for this Earth Auger around your home and buildings. Shipping weight 45 pounds. Not Mailable. Not Prepaid. Estimated Freight Charges on Page 3. \$6.95

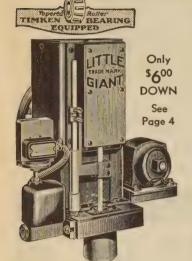




A MODERN PUMP will make life easier

DEEP WELL PUMPS

WITH ELECTRIC MOTOR OR GASOLINE ENGINE



LITTLE GIANT Electric Pump Head

Entirely automatic—it starts by itself and stops by itself . . . there's not a thing for you to do but turn the tsp and draw all the fresh, running water you need from the faucet—whenever you want it. from the faucet—whenever you want it. No matter what your need—bath, laundry, kitchen, dairy, garden or barnyard—there's always plenty of water. It's all assembled into one unit for you. Place it in position, make necessary pipe connections and it's ready to go to work.

and it's ready to go to work.
Whether your well is 22 feet deep or 300 feet deep the "Little Giant" will relieve you from the tiresome, time-taking chore of pumping water by hand. Delivers 100 to 300 gallons per hour, depending on depth of well and cylinder size.

Here Are the Little Giant's Quality Features

Here Are the Little Giant's Quality Features

Heavy Duty Pump Head—latest, improved double-action type...upstroke lifts water from well...downstroke forces it into tank. Heavy Duty Repuil-sion-Induction Type Electric Motor—starts at 20 pounds...shuts off at 40 pounds...adjustable to 60 pounds.

Famous Timken Roller Bearings insure longer life, smoother running and lower operating cost. Oversize Machine-cut Gears—1½ inches wide, run in oil. Working parts in head lubricated by splash pump system.

Other Important Features of the Little Giant are—Pressure Air Chamber, Check Valve, Air Pump, Automatic Pressure Switch and Silent V-Belt.

Parts carrying water may be mounted 5 feet below pump to prevent freezing. Order Anti-Freeze Rods at right. When used with open type cylinders, plunger may be withdrawn from well without disturbing pump. Double pole switch with outlet box and armored cable to motor. 5-inch stroke, 60 strokes to the minute. For 2½-inch drop pipe but bushed to 2 inches. Discharge for 1-inch pipe. Use 7/1s-inch rods or 3/s-inch pipe for pump rods.

Tanks and accessories listed at right; pipe and fittings on pages 41 to 43; cylinders on page 52. (See list above at right showing necessary equipment, for a deep well outfit.) Dimensions 13 by 27 by 30 inches high. Depths given are when pumping against 40-lb. pressure; if pumping into open tank, it will pump 50-ft. deeper. Horsepower required depends on depth of well and sile of cylinder. For 110 to 220-volts, 60-cycle, A. C.

Ship. wt. 240 to 280 pounds. Shipped Not Prepaid from Chicago. Estimated Freight Charges are listed under "Power Pumps," on Page 3.

			Easy	Maxi	mum Lift of V	Water
Article	Size	Cash Price	Pay-		113/16-in. Cyl.	21/4-in.Cyl.
Number	Motor	Price	ment Price	120 gal.	200 gal. Per hr.	300 gal. Per hr.
				Per hr.		rer nr.
181 H 3421	1/3 H.P.	\$67.50	\$74.00	100 ft.	60 ft.	*****
181 H 3422	½ H.P.	76.95	84.45	200 ft.	150 ft.	75 ft.
181 H 3423	3% H.P.	86.95	95.45	300 ft.	225 ft.	100 ft.



Semi-Automatic

DEEP WELL SYSTEM

With Gasoline Engine

Price Complete

Same Pump Head as above but powered by an air cooled Gasoline Engine instead of electric motor. Simply start the engine when pressure is low and the Automatic Shut-off Switch stops it when tank pressure reaches 40 pounds. Engine bolts to brackets on pump head and may be removed and used for other tasks. It is the famous Ward Sattley Enginedescribed in Ward's General Catalog. Complete with 120-gallon storage tank, galvanized inside and out; deep well cylinder; 1½-inch wood pump rod and sufficient 2-inch galvanized pipe and fittings for 50-ft, well only. For deeper or shallower wells add or subtract 39c per foot to prices quoted below. Shipped Not Prepaid from Chicago. Estimated Freight Charges see Page 3 under "Power Pumps."

TITIER COLD T TOTAL					
Article	Size	Capacity	Max. Lift	Approx.	Price
Number	Engine	per Hour	1%-in. Cyl.	Ship. Wt.	Each
181 H 8235	34-H.P.	200 gal.	70 feet	730 lbs.	\$139.00
181 H 8236	1½-H.P.	200 gal.	225 feet	755 lbs.	159.00

WHAT YOU NEED FOR A DEEP WELL OUTFIT

- Pump Head as listed at left.
- Cylinder (Select type from information on page 52).
- Tank as listed below.
- Pressure Gauge and Relief Valve.
- Fresh Water Valve (optional).
- Pipe and Pump Rod (from pump head and cylinder).

If you have any questions, write our Engineering and Information Department

DEEP WELL ACCESSORIES

Galvanized Tanks

Heavily galvanized inside and outside upright type tanks tested to 150 lbs., hydrostatic pressure. These tanks are not range boilers but especially made to meet the requirements for Pressure Water Systems. Water gauge not included, see 81 H 3150 below. Pipe and fittings, on Pages 41 to 43. Shipped Not Prepaid from stock. Easy Payment on Page 4. Estimated Freight Charges see Page 3 under "Galvanized Tanks."

-	Art. Number 181 H 3142 181 H 3143 181 H 3144	Capacity 18 gal. 42 gal. 80 gal.	12 1 16 1 20 1	Inches by 36 by 48 by 60	Inlet 1 in. 1 in. 1 in.	34 in. 34 in. 34 in.	· 1	48 lbs. 94 lbs. 70 lbs.	Cash \$ 6.60 7.95 13.45
	State size, Ta	Capac Gallo	ity ns	Ship.	Wt.,	281 H 8215 Black Paint \$13.95		281 H Galva	8216 anized
	2 by 6 2½ by 6 3 by 6	144 220 315	,	24 · 40 52	10 05	16.95 26.95 38.95		19 32	.75 2.50 3.50

Anti-Freeze Rods

Water Gauge 81 H 3150—Use for determining water level in Water System tank. Ship. wt. 2½ lbs. For 42 or 80-gallon size only. \$1.75

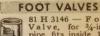


PRESSURE GAUGE

81 H 3151-Registers 81 H 3151—Registers
0 to 80 lbs. 2½-inch
face marked for each
2 lbs. pressure. For
1½-inch pipe. Mailable but Not PreShipping weight 12 ounces. 80c

FRESH WATER VALVE

81 H 3147—Permits pumping water direct from well instead of through tank. For deep well pump. Fits 1-in. pipe. Mailable. Not pipe. Mailable. Not Prepaid. Shipping weight 1 pound. \$1.85



Semi-Automatic SHALLOW WELL GASOLINE ENGINE PUMP



PUMP and ENGINE

PUMP and ENGINE
No matter if you live miles away from a power line—you can still have all the running water you need with all its advantages. This powerful, efficient Pumping Outfit does the trick. And it's so simple to operate—you just step on the handy pedal of the gasoline motor when pressure in tank is low. That's all—for it stops by itself when pressure reaches 40 pounds. Pumps 250 gallons of water per hour, which is sufficient for all ordinary needs. In fact, for the average family it is only necessary to set the pump in motion twice a day. And it takes only a few dollars to put this system in your home right now because our Budget plan makes it so easy to buy from Wards, see Page 4.

Easy Payments See Page 4

Double Acting Reciprocating Type Pump. Will draw water any distance within 100 feet of water supply where lift does not exceed 22 feet. And you can depend on it for service, too, because the cylinder is brass lined to last a long time.

Four-Cycle, Air-Cooled Sattley Engine. Single L-head Cylinder for smoother, quieter action. Develops 3/4 horsepower at 1750 R.P.M. Foot pedal starter. Oversize bronze bearings. Oil pump supplies lubrication. It's Ward's Famous "Sattley" described in our General Catalog.

Heavy Steel Tank. Galvanized Inside and Out. Tested to 75.

General Catalog.

Heavy Steel Tank, Galvanized Inside and Out. Tested to 75 pounds working pressure. Capacity 144 gallons. Equipped with water gauge, pressure gauge and relief valve. ½-inch supply pipe from tank to house. ¾-inch suction pipe.

Tank shipped promptly from warehouse in Chicago, Illinois. Pump and fittings shipped from factory in Springfield, Illinois. For Estimated Freight Charges see Page 3 under "Power Pumps."

281 H 8228—Complete as described. Ship. wt. 420 lbs. \$79.95 281 H 8229—Pump and Engine only. Ship. wt. 130 lbs. 59.95

Outfit \$7995 Complete With Tank

Clean and Convenient as City Plumbing for homes with running water and no sewers

Windsor SEPTIC TANK

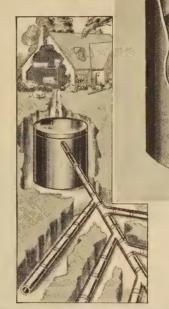
SAFE-SIMPLE-ODORLESS

The cleanliness and personal convenience of modern plumbing is no luxury when Ward's offers the finest type of Septic Tank at so low a price. It is safe and certain and after it is installed you merely leave it alone. The extent to which it safeguards and protects the health and wellbeing of your family is invaluable. Ward's Windsor Tanks are...

- 14 Gauge Copper Bearing Steel Electrically Welded
- Designed for—Greatest Efficiency—No Chemicals
- Built-in Connections Keep Pipe Securely in Position
- Recommended By Health Authorities

Operates on the same principle as many of the disposal plants in America's largest cities. All germs are killed and the sewage purified by a natural process of bacterial action. So sanitary and safe that it may be installed within 10 ft. of house without any odor. Recommended as health insurance for homes without sewers. It is simple to install, too—thousands of our customers have done it without any previous experience by following our simple instructions which accompany each order. It is only necessary to connect it to house drain using several lengths of soil pipe—ordinary tile is used for the disposal bed which should be as far as possible and drain away from well or water source. The entire installation for the average home should be completed in two days by two men. Once it is installed it requires practically no attention—possibly an occasional cleaning, depending on soil conditions. Cover is removable allowing easy access. Shipped Not Prepaid from Factory near Chicago and Western Ohio. Estimated Freight Charges under "Septic Tanks" on Page 3.

Article Number	Diameter Tank, In.	Depth Inches	Working Capacity Gals.	For Family of	Ship, Wt. Approx. Lbs.	Price Each
281 H 8210	38	48	200	6	229	\$13.25
281 H 8211	46	48	300	10	288	15.75
281 H 8214	52	60	500	20	351	24.95





Cash Price

Make your own repairs with these HANDY TOOLS



Armstrong Pattern Pipe Stocks

All sets equipped with Adjustable self centering guides. 84 H 7416—Threads pipe size 1/4, 1/8, 1/2, 3/4 and 1 inch. Length of stock 34 inches. Ship. wt. 14 lbs. Per set .\$7.25 84 H 7420—Pipe Stock with four dies, Length 38 inches, Threads ½, ¾, 1 and 1¼ inch pipe. Ship. wt. 15 pounds.

84 H 7423 — Larger pipe stock for heavier work. Length 52 in. Threads 11/4, 11/2 and 2 inch pipe. Ship. wt. 27 pounds. Per set. \$10.65



Electric Soldering Iron

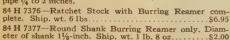
130-Watt

1-inch removable Copper tip, polished brass barrel.
Heating element No. 4 nichrome on lava spool. Operates on any 110 to 120-volt current.

84 H 5202.....

Ratchet **Burring Pipe Reamer** Saves Time and Labor

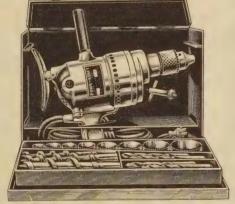
Ratchet head completely enclosed, keeps the moving parts free from dirt and burrs. For pipe 1/4 to 2 inches.





Radiator Nipple Wrench

Strong malleable iron, For 3/4, 11/4, 11/2 and 2-inch radiator valve unions. Shipping weight 5 pounds. Mailable but Not Prepaid. 81 H 6789—Each90c



Complete

Powr-Kraft Electric Tool Set

Nowadays most of us are alike when it comes to spending money. That's why we know any electrician, plumber or carpenter that sees this bargain will surely appreciate its timeliness. For it's exactly what the thrifty man has

arpenter that sees this bargain will surely appreciate its timeliness. For it's exactly what the thrifty man has been looking for.

Every tool that goes to make up this outfit has been very carefully selected and are all of a high-standard quality. They are especially adaptable for maintenance work of practically all types and will take care of most any drilling or hole cutting job.

Just look at what you get for only \$57.50—First, a ½-inch Heavy Duty Ball-Bearing Electric Drill with G. E. Universal Motor for use on either Direct or Alternating Current and the latest type Cutler Hammer double pole switch . . . Heavy Rubber Cord, Popular Jacobs Chuck . . . seven hole saws, sizes . . . /%, 11/6, 13/8, 11/8, 11/8, 11/2, 11/4, 2 and 21/4 inches with two mandrels . . . three high-grade wood augers, sizes: 11/4, 11/4, 13/4 inches and, five high grade twist drills, sizes: 1/4, 16, 18/4, 11/6, 18/4, 10/6, 18/4 inches and, five high grade twist drills, sizes: 1/4, 16/6, 18/4, 1/6, 18/4, 1/6, 18/4 inches and, five high grade twist drills, sizes: 1/4, 16/4, 18/4, 1/6, 18/4 inches and, five high grade twist drills, sizes: 1/4, 16/4, 18/4, 1/6, 18/4 inches and, five high grade twist drills, sizes: 1/4, 18/4, 18/4, 18/4, 18/4 inches and strong metal tool box.

Taking all in all—it's just a real honest-to-goodness

Drop-Forged



Sakeside Stillson Wrenches

A husky pipe wrench for plumbers, steam fitters, mechanics, etc. Carefully tempered jaws. Teeth will stand up under the heaviest work without crushing. State size.

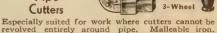
Length	Takes	Ship.	84 H 7480
Open	Pipe	Wt.	Wrench
8 inches	34 inches	1 lb.	35c
10 inches	1 inches	2 lbs.	45c
14 inches	1½ inches	3 lbs. 8 oz.	59c
18 inches	2 inches	6 lbs.	89c
24 inches	2½ inches	9 lbs.	\$1.39
36 inches	3 inches	20 lbs.	2.75

Hinged Pipe Vise

Holds pipe, rods, bars with strong grip. Tempered steel jaws insure a firm grip for cutting or threading. Side latch and hinge permit taking pipe out sideways. Capacity ½ to 2½ inches. Malleable iron frame. Lag screws included. Shipping weight 9 pounds. \$2.25

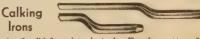


Barnes Pattern Pipe



revolved e

84 H 7540—Cuts ½ to 1-in. Ship. wt. 3½ \$1.98 pounds. \$4 H 7541—Cuts ½ to 2 in. Ship. wt. 6 lbs. 2.45



Made of solid forged tool steel. Regular pattern ¾ inch stock. Yarning iron ¾-inch stock. Ship. wt. each 1 lb. Mailable but Not Prepaid.

... These MODERN ENTRANCE DOORS Will Give



Your Home That Charming

Old World Atmosphere . . .

People who have travelled through the romantic countryside of France, Spain and England, tell us that these are practically perfect reproductions of antique doors. Rustic old-iron finish hinge plates and lock sets are copies of the ironwork found on the doors of century-old chateaux and manor houses. These Ward doors give the same ruggedly beautiful effect as the picturesque originals. If your home reflects any of the old-world styles, you'll want one of these artistic doors.

Today, with beautiful homes planned in Old English, Colonial, Spanish and French Provincial styles, the front door has come to be of great importance. These distinctive V-joint Batten doors are correct in every detail. Heavy and massive in appearance, yet correctly proportioned. They're full 13/4 inches thick. Built up on a White Pine core to which the tongued and grooved V-Jointed White Pine veneer is glued. All doors are carefully wrapped in tough paper and securely crated. Hardware Not Included. See prices below.

Old Iron Finish Haraware

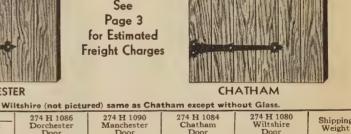
Rustic Front Door Lock Set. Will not streak or mar doors. Large grip handle, length 10½ inches, with thumbpiece on outside. Knob inside. Reversible cylinder lock, size 5 by 3½ inches. All exposed parts made of solid cast brass.

There is nothing that adds more to a front door than hinge plates of Rustic Old Iron Design. All exposed parts of cast brass, old iron finish.

84 H 3813-Length 12 inches. Shipping weight 1 lb. 8 oz.\$1.35 84 H 3812-Length 18 inches. Shipping weight 2 lbs. 8 oz. 1.48 84 H 3814-Length 24 inches. Shipping wt. 2 lbs.12 oz. 1.95 84 H 3815—Curved Hinge. For right or left hand side of door. State side wanted. Shipping wt. 3 lbs.\$2.85



Freight Charges



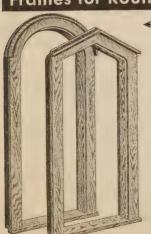
MANCHESTER

Width Height D	Door	Door	Door	Door	Weight
3—0 by 6—8	\$22.15	\$19.20	\$18.80	\$13.75	110 lbs.
3—0 by 7—0	22.80	19.85	19.50	14.45	120 lbs.

Doors Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia

Frames for Round and Gothic Doors

Combination Storm and Screen Doors



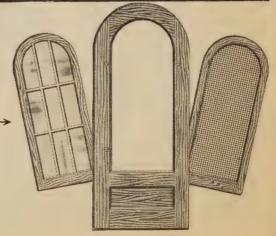
Frames are constructed for Gothic and Round top doors. Made of Frames are constructed for Gothic and Round top Goors. Made or clear Western White Pine. Jambs 13/6 by 51/4 inches. Rabbetted 1/2 by 13/4 inches. Sill 15/6 by 71/4 inches. Outside casing 11/6 by 41/2 inches. Drip cap 11/6 by 15/6 inches. Made to receive 11/6-inch storm or screen doors. Frames are for standard 2 by 4 wall construction. For frames to fit square doors See Page 74.

	Size		Average	Round	Gothic
Width eet, In.		ight Inches	Shipping Weights	Top 274 H 604	Top 274 H 617
30 30	by 6 by 7	8 0	55 pounds 65 pounds	\$6.95 7.10	\$6.95 7.10

In winter a dependable storm door glazed with clear glass which helps keep heat in and cold out. In summer a sturdy screen door with 16-mesh Bronze wire. It's easy to change, too—a screwdriver and two minutes of your time is all you need to substitute panels. The frame itself is carefully and expertly constructed of selected kiln-dried clear Western White Pine, full 1½ inches thick. Stiles are 4¾ inches wide. Firmly mortised and tenoned.

0:		
Size	Average	Round
Width Height	Shipping	Top
Feet Inches Feet Inches	Weights	274 H 1078
3-0 by 6-8	85 pounds	\$14.65
3-0 by 7-0	95 pounds	14.90

Frames and Combination Doors shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.



TRULY COLONIAL . . . through just such doors

Washington welcomed guests to Mount Vernon...



COLONIAL architecture expresses a simple and rustic beauty that has a charm all its own. This authentic colonial door is a reproduction inspired by the gracious doorways that welcomed guests to spacious Southern homes in pre-revolutionary days. It radiates a warmth and hospitality that sets your home apart. And you need pay no more for this sturdy, massive door than for one less suited to Colonial design. Place your order now with the confidence you are securing lasting beauty and long service at savings typical of Ward's.

COLONIAL SIDELIGHTS

These sidelights give the final touch to the Colonial atmosphere you desire to create. A pleasing flood of light gleaming through the glass at night ... offers a truly cheerful welcome to your guests.

Sidelights are carefully made of clear Western White Pine, sanded, smoothed and ready for painting. Glazed with 8 lights of double strength glass. They match our Colonial door perfectly in design. For Sidelight Frames see Page 64.

Opening Size Width Height Ft. In.	274 H 1061 White Pine	Shipping Weight Each Sidelight
1—2 x 6—8	Each \$3.75	50 lbs.
1—2 x 7—0	Each 3.90	55 lbs.

WHITE PINE COLONIAL DOORS

This handsome Colonial door is as fine as expert workmen, proud of their craft, and using the best of materials, can possibly make it. Clear Western White Pine 134 inches thick, thoroughly seasoned and kiln-dried. All joints securely doweled with 5-inch hardwood dowels and glued.

Every detail is carefully designed to match authentic Colonial models. Furnished sanded and ready to paint.

Opening Size Width Height Ft. In.	274 H 1052 White Pine	Average Shipping Weights
2—8 x 6—8 3—0 x 6—8	\$6.35 6.80	85 pounds 90 pounds
3-0 x 7-0	7.35	95 pounds

Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

These CRAFTSMAN ENTRANCE DOORS are outstanding favorities

They're appropriate for any home . . . they're EXTRA sturdy, EXTRA quality



TODAY architects emphasize the importance of the front door, because it so often can set an atmosphere of hospitality for the entire home.

You couldn't find a sturdier or better looking door than the HOLMES. Because of its simplicity it will harmonize with any type of architecture. It's made of two woods—White Pine to withstand check and warp when exposed to severe weather

Oak Veneer to give your home extra beauty by its fine grain and rich, warm color.

Strongly made of the best materials, this Door is priced low because Wards ship direct to you from the mill.

Shipped Not Flepaid from Mill in Chicago, Fhiladelphia of Eastern Iowa.					
Size	White Pine	274 H 1186 White Pine	274 H 401 Veneered Oak	274 H 402 Veneered Oak	Shipping
Width Height Ft. In. Ft. In.	Clear	1% In. Thick Bevel Plate Glass	13/4 In. Thick Clear Glass	13/4 In. Thick Bevel Plate Glass	Weight Pounds
2—8 x 6—8 3—0 x 6—8 3—0 x 7—0	\$6.45 6.70 6.95	\$12.20 12.85 13.90	\$14.75 15.50 16.75	\$20.85 21.55 22.85	110 120 130

Freight Charges Low See Page 3 Holmes - Door Whittier Door -



YOUR front door should be more than a protection against intruders and the weather -it should tell a flattering story of your own good taste.

The WHITTIER is a door to be proud of. Beautiful Oak Veneer with Ward's thick, beveled plate glass, it adds beauty and dignity to any home. Driving rains, freezing cold or summer heat . . . the sturdy White Pine withstands them all hanging straight and true.

Both woods are especially chosen for their beauty and grain and the excellent way they take a finish. Like all our good doors, the Whittier will give long and faithful service.

Shipped Not Prepaid from Mill in Chicago, Philadelphia or Eastern Iowa

0:	274 H 1189	274 H 1188	274 H 425	274 H 406	
Size	White Pine	White Pine		Veneered Oak	
**** 1.1 ** * 1.	13/8 In. Thick	13/8 In. Thick	13/4In. Thick	13/4 In. Thick	Weight
Width Height		Bevel Plate	Clear	Bevel Plate	Pounds
Ft. In. Ft. In.	Glass	Glass	Glass	Glass	
2-8 x 6-8	\$5.50	\$13.80	\$12.25	\$19.50	105
3-0 x 6-8	5.95	15.70	13.95	21.45	115
3—0 x 7—0	6.25	16.90	14.25	. 22.80	120



Buy these MODERN ENTRANCE than ordinary doors yet they're better

IN MAKING these fine doors we were more interested in their quality than we were in keeping their prices down, but with the lumber market low and our money-saving-method of shipping direct from mill to you we've been able to do both. In fact, this is the first time in years we've seen such handsome doors as these, built as carefully of first grade materials, selling for such amazingly low prices.

Every one of these doors is strong and sturdy, built to stand up staunchly in all kinds of weather. White Pine is used for stiles and rails because it withstands check or warp, and Fir for the panels because of its beautiful grain. That's why we especially recommend a Ward door built of solid white pine for entrance ways with no protecting porch.

For extra beauty and to give your home charm and distinction, we've also built these doors of beautiful Oak veneer. Like fine furniture, Wards' doors are built up on a white pine core with the veneer glued on with waterproof glue

Estimated

Freight

Charges on

Page 3



See Wards'
General
Catalog
for
Complete
Line of
Hardware

LONGFELLOW

\$595

White Pine Doors 13% inches thick

SIZE Width Height Ft. In. Ft. In.		274 H 1181 Glazed with Bevel Plate Glass	Average Ship. Wts.
2-8 x 6-8	\$5.95	\$10.95	75 lbs.
3-0 x 6-8	6.20	12.00	80 lbs.
3-0 x 7-0	6.45	13.45	90 lbs.

If you wish White Pine Doors 1¾ inches thick so state on your order and add \$1.75 to above prices.

Veneered Oak Doors 13/4 inches thick

SIZE Width Height Ft. In. Ft. In.	274 H 405 Glazed with Clear Glass	274 H 403 Glazed with Bevel Plate Glass	Average Ship. Wts.
2-8 x 6-8 3-0 x 6-8 3-0 x 7-0	\$14.35 14.65 14.95	\$18.80 20.00 21.65	98 lbs. 105 lbs. 112 lbs.



\$615

White Pine Doors 1% inches thick

SIZE Width Height Ft, In. Ft. In.	274 H 1184 Glazed with Clear Glass	274 H 1185 Glazed with Bevel Plate Glass	Average Ship. Wts.		
2-8 x 6-8 3-0 x 6-8 3-0 x 7-0	\$6.15 6.45 6.70	\$11.55 12.25 13.30	75 lbs. 80 lbs. 90 lbs.		

If you wish White Pine Doors 13/4 inches thick so state on your order and add \$1.75 to above prices.

Veneered Oak Doors 13/4 inches thick

SIZE Width Height Ft. In. Ft. In.	274 H 409 Glazed with Clear Glass	274 H 408 Glazed with Bevel Plate Glass	Averag Ship. Wts.
2-8 x 6-8	\$14.50	\$19.65	98 lbs
3-0 x 6-8	14.80	19.85	105 lbs
3-0 x 7-0	15.30	21.75	112 lbs



TACOMA

\$695

Clear White Pine Doors 13% inches thick

WACINE OIL	Average ship. wis. 75, 60 and 50 pounds.						
SIZE	274 H 437 With	274 H 1183 With	274 H 436 With				
Width Ht.	Fir Panels	Gum Panels	Fir Panels				
Ft.In. Ft.In.		Clear Glass	Bevel Plate				
28 x 68 3-0 x 68		\$7.25 7.55	\$ 9.00 9.85				
3-0 x 0-0 3-0 x 7-0		7.95	10.25				

If you wish White Pine Doors 13/4 inches thick with Fir panels so state on your order and add \$1.75 to above prices.

Doors 13/4 inches thick age ship. wts., 98, 105 and 112 p

SIZE	274 H 1148 White Pine	Oak Veneer	
Width Ht.	Gum Panels	Glazed with	Glazed with
Ft. In. Ft. In.	Clear Glass	Clear Glass	Bevel Plate
2-8 x 6-8	\$8.85	\$14.75	\$16.80
3-0 x 6-8	9.15	15.45	17.75
3-0 x 7-0	9.70	15.75	18.10

DOORS . . . they cost so little more styled . . . and you'll be better satisfied

under great pressure. Doors made this way resist warping. Only the finest grade of rotary cut Oak veneer, especially chosen for beauty of grain is used—and it takes a beautiful varnish finish.

The plate glass in Ward doors is the same, thick lustrous quality used for show cases and other places where extra endurance and beauty is required.

So many people have difficulty finding just the right door to "go with" their houses. That's why we styled these doors to harmonize with all types of architecture. Each one is architecturally correct and perfectly proportioned for dignity and beauty. The Longfellow, Tacoma or Oakland for instance would be exactly right with any house that has picturesque divided light windows. Yet they'd add a touch of variety to the home with two-light windows. The graceful glass panels of the Riley or Sacramento suggest combination with long, horizontal bungalow lines, but put one of these doors in another type of home and it will look equally well.



Easy Payments See Page 4



For Complete Line of Finishing Materials See Ward's General Catalog



\$495

Clear White Pine Doors 1% inches thick

1/8						
SIZE	274 H 439	274 H 438	Average			
lidth Height	Fir Panels	Fir Panels	Ship.			
t. In. Ft. In.	Clear Glass	Bevel Plate	Wts.			
2-8 x 6-8	\$4.95	\$8.10	75 lbs.			
3-0 x 6-8	5.20	8.85	- 80 lbs.			
3-0 x 7-0	5.55	9.20	90 lbs.			

If you wish White Pine Doors 134 inches thick so tate on your order and add \$1.75 to above prices.

Doors 13/4 inches thick
Average ship, wts. 105, 110 and 115 pounds.

			في المناطقة
SIZE	White Pine	274 H 407 Oak Veneer	274 H 414 Oak Veneer
Width Height Ft. In. Ft. In.	Gum Panels	Glazed with Clear Glass	Glazed with
2-8 x 6-8 3-0 x 6-8	\$6.60 6.95	\$11.05 11.70	\$14.20 15.50
3-0 x 7-0	7.45	12.35	16.05

Clear White Pine Doors 13% inches thick

SIZE		274 H 440	Average
Width Height		Fir Panel	Ship.
Ft. In. Ft. In.		Bevel Plate	Wts.
2—8 x 6—8	\$5.90	\$7.50	75 lbs.
3—0 x 6—8	6.10	8.45	80 lbs.
3—0 x 7—0	6.30	8.80	90 lbs.

If you wish White Pine Doors 13/4 inches thick so state on your order and add \$1.75 to above prices.

Veneered Oak Doors 13/4 inches thick

	74				
SIZE Width Height Ft. In, Ft. In,		274 H 412 Glazed with Bevel Plate Glass	Average Ship. Wts.		
2-8 x 6-8 3-0 x 6-8	\$12.85 13.60	\$14.45 15.90	98 lbs. 105 lbs.		
3-0 x 7-0	14.15	16.15	112 lbs		

Clear White Pine Doors 13% inches thick

SIZE		274 H 442	Average
Width Height		Fir Panel	Ship.
Ft. In. Ft. In.		Bevel Plate	Wts.
2-8 x 6-8	\$6.70	\$ 8.75	75 lbs.
3-0 x 6-8	6.95	9.60	80 lbs.
3-0 x 7-0	7.35	10.00	90 lbs.

If you wish White Pine Doors 13/4 inches thick so state on your order and add \$1.75 to above prices.

Doors 13/4 inches thick

Average	snip.	Wts.	105,	110	and 115	pounds.

SIZE	White Pine	274 H 411 Oak Veneer	Oak Veneer
Width Height Ft. In. Ft. In.		Glazed with Clear Glass	Glazed with Bevel Plate
2-8 x 6-8	\$8.60	\$13.70	\$15.80
3-0 x 6-8 3-0 x 7-0	8.90 9.45	14.50 15.05	17.15 17.70

65 out of every 100 homes find these doors MOST



7ARDS recommend these doors for those who are looking for quality, appearance and good workmanship in doors, and yet want to keep the cost down. Order any door separately, if you wish, but you can save time and money by ordering a complete door set. (See bottom of this page.)

Our designs are those approved by leading architects as correct. They will harmonize with almost any style of home. Notice their good proportionsthe wide stiles and heavy bottom rails that give them strength and dignity.

All doors are carefully constructed by expert workmen to insure long service. Full 5-inch hardwood dowel pins with high grade waterproof glue, hold stiles and rails securely together. Carefully sanded—ready to finish.









YORK \$805
Complete

DOVER \$820 Complete

These Doors Complete With Frame—Sill—Threshold—Trim— Lock Set and Hinges—ALL at One LOW, Money Saving Price

To save you time in ordering and to eliminate unnecessary waste of materials in fitting, Wards have arranged these attractive doors in complete sets. Everything you need to install a new door is included.

The York and Dover doors are recommended where low

cost is essential. Constructed of well seasoned and kiln-					
SIZE SHIP. WEIGHTS			274 H 445 York Door	274 H 1210 York Door	
Width Height Ft. In. Ft. In.		Complete Sets	1% In, thick Door only		
2-6 by 6-6 2-8 by 6-8		141 lbs. 146 lbs.	\$2.70 2.90	\$8.05 8.40	
3-0 by 6-8	72 lbs.	148 lbs.	3.20	8.80	

dried materials—the same as our other doors.

The clear Western White Pine frame is for standard
2 by 4 studding construction where sheathing and plaster
are used. Inside trim is clear Yellow Pine with head and
side casings 3½ inches wide. Good quality, dull brass
Lock Set and Hinges included. For a complete description

SIZE	SHIP. WEIGHTS		274 H 1066 Dover Door	274 H 1223 Dover Door
Width Height Ft. In. Ft. In.	Doors Only	Complete Sets	13/8 In.Thick Door only	13% In. Thick
2-6 by 6-6 2-8 by 6-8		141 lbs. 146 lbs.	\$2.85 3.05	\$8.20 8.55
3-0 by 6-8	72 lbs.	148 lbs.	3.35	8.95

of frame and trim see 274 H 609 on page 74 and 274 H 646 on page 75.

Doors, frame and trim all furnished smoothly sanded and ready to stain or paint to match your wood work.

OPENING SIZE	SHIP. W		Byron Door	
Width Height	Doors	Complete	13/8 In. Thick	13/8 In. Thick
	Only	Sets	Door Only	Complete Set
2-6 by 6-6	85 lbs.	161 lbs.	\$4.05	\$ 9.40
2-8 by 6-8	86 lbs.	162 lbs.	4.20	9.80
2-8 by 7-0	89 lbs.	165 lbs.	4.50	10.25
3-0 by 7-0	97 lbs.	173 lbs.	4.80	10.50

Shipped promptly Not Prepaid from mills in Chicago, Eastern Iowa or Philadelphia.



ECONOMICAL for front, rear or side entrances

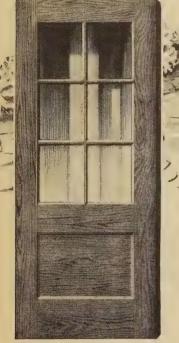
ALL but two of our doors (York and Dover) are made of clear Western White Pine—the outstanding wood for serviceable yet economical doors.

The York and Dover doors are "B" Quality Fir. They are just as strong, just as well made, but are graded "B" because of small imperfections in the wood—which paint or stain will cover.

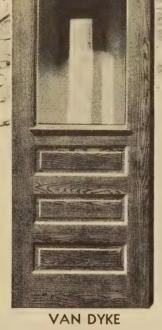
Freezing winter cold or blazing summer heat—dampness or dryness—White Pine and Fir both will withstand exposure to all kinds of weather. We have many letters from enthusiastic customers telling us that Wards' doors hang straight and true for years.

Glazed with good quality clear glass firmly held in place by wood stops. All doors carefully wrapped and crated for safe delivery.

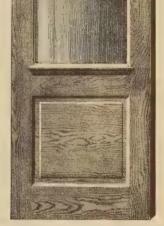




Estimated Freight Charges on Page 3



Easy Payments on Page 4



HAWTHORNE

\$5⁸⁵

\$495

LOWELL

\$485

These Doors are ALL Made of First Quality Clear Western White Pine

Wards' Hawthorne door has long been an outstanding favorite with thrifty people. It is especially recommended for use in places where the glass might accidentally get broken. Because the glass is divided into six small lights instead of a single large one, the cost of replacement is extremely small.

Opening Size Width Height	Approxi- mate Glass	Ship.	274 H 1072 Hawthorne Clear Glass	
			1% In. Thick	13/4 In. Thick
2—8 by 6—8 3—0 by 7—0	10 ³ / ₄ by 13 12 ³ / ₄ by 14 ¹ / ₄	85 90	\$5.85 6.40	\$7.20 7.90

Take special notice of the water table or drip cap at the top and bottom of the glass on our Van Dyke Door. This attractive feature adds much to the massive appearance of the door. The three raised panels give it an atmosphere of strength and dignity.

SIZE	Approxi- mate Glass	Ship. Wt.	274 H 433 Van Dyke Doo Clear Glass	
Width Height Ft. In. Ft. In.		Lbs.	13% In. Thick	13/4 In. Thick
2—6 by 6—6 2—8 by 6—8	20 by 30 22 by 32	85 86	\$4.75 4.95	\$6.60
2—8 by 7—0 3—0 by 7—0	22 by 36 26 by 36	89 97	5.25	7.00

At Wards' low price you will find our Lowell door a real bargain. Note the large light of glass with which it is glazed, the attractive raised panel at the bottom. The water table at the top and bottom of the glass is cemented into place with water proof glue.

SIZE	Approxi- mate	Ship.		H 435 l Door Glass
Width Height Ft. In. Ft. In.		Wt. Lbs.	13/8 In. Thick	
2—8 by 6—8 3—0 by 7—0	22 by 38 26 by 42	83 89	\$4.85 5.45	\$5.90 6.75

See your copy of Wards' General Catalog for a complete line of paint and varnish.

You need at least one MIRROR DOOR!

You should have one in Every Bedroom ...

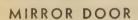
in the Bathroom . . . in your Guest Closet



YOU MUST have doors, and if you're particular about your appearance, you're going to want full-length mirrors. Why not settle two problems in one by installing mirror doors. Modern home-owners install them in every bedroom, in the bathroom and in coat closets downstairs.

Every woman, and man, too, looks and feels better groomed after a head-to-toe picture so easily obtained in a full length mirror door. That's why a mirror is one of the first things a guest searches for upon entering the house. And a mirror door is just as important as it is convenient.

Authorities agree that a mirror is one of the most useful articles for decorating the home. Its reflection of colors and objects gives the room life and warmth. Why not install a mirror door now, while prices are low? At Ward's they cost much less than you'd ordinarily pay for glass and door if you bought them separately.



Furnished in plain Red Oak, All Gum Veneer or White Pine stiles and rails with Fir panel. The Mirror, with its lustrous reflecting surface, is made of best quality polished plate glass. The opposite side of this door is the same as our Insert-Panel door shown below at right. Doors are 1½ inches thick with 5-inch hardwood dowel pin construction. Carefully and smoothly sanded so that you can easily stain or enamel them to match your woodwork. Average ship, wt. 95 lbs. Shipped Not Prepaid from Chicago, Eastern Iowa, or Philadelphia, Pa., whichever is nearest you.

Size Width Ht.	Glass Size	274 H 468 W. P. with	274 H 1112 All Gum	274 H 469 All Oak
Ft. In. Ft. In.	5126	Fir Panel	Veneer	Veneer
20 x 60	153/8×601/4		\$15.45	\$17.65
2-6 x 6-8	213/8x661/4	20.90	22.40	24.80
2-8 x 6-8	233/8×661/4	22.50	23.90	26.40

MAKE YOUR OWN MIRROR DOORS

It's Easy . . . Takes Only a Few Minutes . . . And Is Very Economical

Panel

Glass

Glass Stop Moulding

Door Rail .

with this complete outfit you can make a beautiful Mirror Door out of any door in your home. We furnish either plain or bevel plate mirror, door moulding, glass stop and brass screws for applying. The glass stop and mouldings frame the mirror and hold it firmly in place. Can be put on in a few minutes without even removing door.

Below you will find sizes of mirrors to order for doors of various sizes. The moulding can be furnished in Yellow Pine, White Pine, Birch or Oak.

State wood wanted. Shipped Not Prepaid from Mills in Chicago, Eastern Iowa or Philadelphia, Pa., whichever is nearest you.

Size of 274 H 446 274 H 447 Door Width | Hgt. Ft. In. Ft. In. 1½-Inch Bevel Plate Size of Plain Plate Mirror Lbs. Mirror Mirror 2-0 x 6-0 \$10.60 \$14.85 17.85 18.35 70 72



Detail of Wards'
Insert Panel Door

Panel

Panel Rail

Moulding

-Bottom Rail

Freight Charges are Low See Page 3

Easy Payments



THREE-PANEL DOOR

Very popular with Wards' customers because of its splendid construction and low price. Slight imperfections in the wood cause these doors to be graded "B" quality but they are just as strong and well made as other doors which sell for considerably higher prices.

Strongly made with dowel pin construction like all Ward doors. The hardly noticeable imperfections won't show at all when the door is painted or stained.

INSERT-PANEL DOOR

Our newest and most beautiful interior door. One that we know you'd pay much more than Wards' low price if you bought elsewhere.

The center panel is of 3-ply birch, gum, oak or fir veneer. All woods carefully selected. The Mouldings have the grace and dignity of classic architecture.

have the grace and dignity or classic architecture.

If you're striving for perfection in every detail of your home, we recommend that you choose this door.

	THREE PA	ANEL		INSERT	PANEL DOO	R	
Size of Doors Width Hgt. Ft. In.	DOOF 274 H 1062 "B" Quality Fir	Ship. Wt. Lbs.	274 H 490 White Pine with Birch Panels	274 H 1064 All Gum Veneer	274 H 485 White Pine with Fir Panels	274 H 450 Veneered Oak Stiles Rails and Panels	Ship. Wt. Lbs.
2-0 x 6-0 2-0 x 6-6 2-0 x 6-8 2-4 x 6-6	\$1.90	33	\$3.70 3.80 3.87 4.11	\$4.80 4.90 4.93 5.11	\$3.37 3.49 3.53 3.76	\$6.99 7.13 7.17 7.44	28 30 30 34
2-4 x 6-8 2-6 x 6-6 2-6 x 6-8 2-8 x 6-8	2.30 2.35 2.45	38 39 41	4.19 4.29 4.33 4.49	5.14 5.27 5.30 5.49 5.67	3.81 3.90 3.94 4.09 4.19	7.49 7.66 7.70 7.97 8.24	34 35 35 35 37
2—6 x 7—0 2—8 x 7—0 3—0 x 7—0		••	4.60 4.79 5.11	5.86 6.31	4.37 4.64	8.50 9.17	40 42

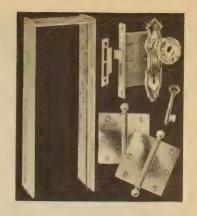
Shipped Promptly Not Prepaid from Mills in Chicago, Eastern Iowa or Philadelphia, Pa.

Buy INTERIOR DOORS complete with Jamb, Trim, and Hardware... all at one low price

EVERYTHING you need to install a new door and all at one low, money saving price. When you buy Complete Door Sets—you save a lot of time in ordering—you get all the pieces you need—there's no waste of time or material in fitting—everything comes to you from one place and at one time.

Below we show three of our most popular interior doors, complete with hardware and finished with our Craftsman trim. (Two sides of trim are included in a set.) At the right the door jamb, lock set and butts are illustrated. Of course, you may order any door separately. You'll find it priced that way in the first table of prices below.

All doors are made of woods carefully selected for grain and color. Five-inch hardwood dowels are used in all joints. This accounts for the great strength and rigidity of our doors. All panels are of three-ply. The trim is made of clear Yellow Pine (oak furnished for oak doors) with head and side casings $3\frac{1}{2}$ inches wide and backband $3\frac{1}{4}$ by $\frac{1}{2}$ inch. Jambs are also of clear Yellow Pine (oak furnished for oak doors) with side jambs dadoed for head jamb. Lock set is of best quality, dull brass finish. Fluted glass knobs. Doors, trim and jamb furnished smoothly sanded, ready to stain or paint to match your woodwork.





For Easy Payments See Our Budget Plan on Page 4

\$5²⁵

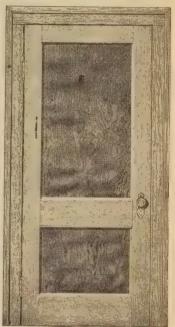
Complete



274 H 466

Complete Set 274 H 1204 \$625
Complete

\$555 Complete



Door Only 274 H 493 274 H 465 274 H 489 Complete Set 274 H 1205 274 H 1206 274 H 1207 274 H 1208

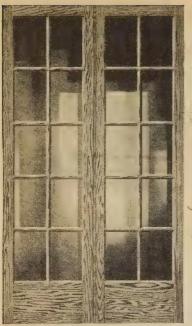
All doors are 1% inches thick.

Price of Doors Only

Size Width Height Fir "A" Quality White Pine with Fir Panels White Pine with										
2—0 by 6—6 2.14 1.89 2.86 2.94 2.20 2.90 3.04 6.90 36 2.4 by 6—6 2.35 2.08 3.13 2.4 l 3.18 2.4 by 6—6 2.35 2.41 2.14 3.21 3.30 2.47 3.25 3.25 3.43 7.25 42 2.6 by 6—6 2.47 2.19 3.30 3.40 2.53 3.35 3.53 7.43 42 2.6 by 6—8 2.50 2.22 3.34 3.45 2.57 3.40 3.57 7.47 43 2.6 by 6—8 2.60 2.33 3.50 3.60 2.67 3.55 3.74 7.75 45 2.8 by 7—0 2.88 2.50 3.71 3.88 2.95 3.83 4.03 8.35 48 3.35 48	Width Height Ft. In. Ft. In.	Fir "A" Quality	Fir "B" Quality	White Pine with Fir Panels	White Pine with	Fir "A"	White Pine with	White Pine with	Veneered Plain	Ship. Wt.
2—0 by 6—8 2.18 1.92 3.03 3.12 2.23 3.08 3.10 6.99 38 2.4 by 6—6 2.41 2.14 3.21 3.30 2.41 3.18 40 2.53 3.25 2.6 by 6—6 2.47 2.19 3.30 3.40 2.53 3.35 3.53 7.43 42 2.8 by 6—8 2.50 2.22 3.3 3.4 3.45 2.57 3.40 3.57 7.47 43 2.6 by 6—8 2.60 2.33 3.50 3.60 2.67 3.55 3.74 7.75 45 2.8 by 7—0 2.88 2.50 3.77 3.88 2.95 3.83 4.03 8.35 48					\$2.79	\$2.09	\$2.75	\$2.90	\$6.70	22
2—0 by 6—6 2.18 1.92 3.03 3.12 2.23 3.08 3.10 6.99 38 2.44 by 6—6 2.35 2.08 3.13 2.1 3.30 2.47 3.25 3.18 3.10 6.99 38 2.40 2.41 2.14 2.14 2.14 3.21 3.30 2.47 3.25 3.43 7.25 42 2.40 2.40 3.34 3.45 2.57 3.40 3.57 7.47 43 2.40 2.40 3.50 2.40 3.50 3.50 3.50 3.50 3.50 3.50 3.60 2.67 3.55 3.74 7.75 45 2.8 by 6—8 2.60 2.33 3.50 3.50 3.60 2.67 3.55 3.74 7.75 45 2.8 by 7—0 2.88 2.50 3.77 3.88 2.95 3.83 4.03 8.35 44 3.85 44 3.85 2.95 3.83 4.03 8.35 48				2.86	2.94	2.20				
2-4 by 6-6 2.35 2.08 3.13 3.30 2.47 3.18 3.18 3.10 3.18 3.10 3.18 3.10 3.18 3.10 3.18 3.10 3.18 3.10 3.18 3.10 3.18 3.10 3.18 3.10 3.18 3.10 3.18 3.10 3.18 3.10 3.18 3.10 3.10 3.10 3.10 3.10 3.10 3.10 3.10			1.92	3.03						
2-4 by 6-8 2.41 2.14 3.21 3.30 2.47 3.25 42 2.6 by 6-6 2.47 2.19 3.30 3.40 2.53 3.25 3.53 7.43 42 2.6 by 6-8 2.50 2.22 3.34 3.45 2.57 3.40 3.57 7.47 43 2.6 by 6-8 2.60 2.33 3.50 3.60 2.67 3.55 3.74 7.75 45 2.8 by 7-0 2.70 2.40 3.61 3.72 2.77 3.55 3.67 3.86 8.05 44 3.0 by 7-0 2.88 2.50 3.77 3.88 2.95 3.83 4.03 8.35 48		2.35	2.08					3.10	0.99	
2—6 by 6—6 2.47 2.19 3.30 3.40 2.53 3.35 3.35 7.43 42 2.6 by 6—8 2.60 2.33 3.50 3.60 2.67 3.50 3.57 7.47 43 42 2.6 by 7—0 2.70 2.40 3.61 3.72 2.77 3.67 3.86 8.05 44 3.0 by 7—0 2.88 2.50 3.77 3.88 2.95 3.83 4.03 8.35 48	2—4 by 6—8	2.41								
2-6 by 6-8 2.50 2.22 3.34 3.45 2.57 3.40 3.57 7.47 43 2-8 by 6-8 2.60 2.33 3.50 3.60 2.67 3.55 3.55 3.74 7.75 45 2-8 by 7-0 2.70 2.40 3.61 3.72 2.77 3.67 3.86 8.05 44 3.0 by 7-0 2.88 2.50 3.77 3.88 2.95 3.83 4.03 8.35 48	26 by 66									
2-8 by 6-8 2.60 2.33 3.50 3.60 2.67 3.55 3.74 7.47 43 2.66 by 7-0 2.70 2.40 3.61 3.72 2.77 3.67 3.86 8.05 44 3.30 by 7-0 2.88 2.50 3.77 3.88 2.95 3.83 4.03 8.35 48			2 22			2.53	3.35		7.43	42
2-6 by 7-0 2.70 2.40 3.61 3.72 2.77 3.67 3.86 4.03 8.35 44 3.0 by 7-0 3.0 by								3.57	7.47	43
2-8 by 7-0 2.88 2.50 3.77 3.86 8.05 44 3-0 by 7-0 3.07 2.73 4.10 3.61 3.72 3.83 4.03 8.35 48							3.55	3.74	7.75	45
3-0 by 7-0 2.68 2.50 3.77 3.88 2.95 3.83 4.03 8.35 48						2.77	3.67	3.86		
					3.88	2.95				
	3-0 by 7-0	3.07	2.72	4.10	4.22	3.15	4.16	4,39	9.05	49

Price of Complete Set Including Door, (Mortised for Lock) Jamb Stops, 2 Sides, Backband Trim, Lock Set and Butts

				,					
Size Width Height Ft. In. Ft. In.	274 H 1201 Fir "A" Quality	274 H 1202 Fir "B" Quality	White Pine with Fir Panels	274 H 1204 White Pine with Fir Panels	274 H 1205 Fir "A" Quality	274 H 1206 White Pine with Fir Panels	274 H 1207 White Pine with Birch Panels	274 H 1208 Veneered Plain Red Oak	Ship. Wt. Lbs.
2—0 by 6—0 2—0 by 6—6 2—0 by 6—8 2—4 by 6—6 2—4 by 6—6 2—4 by 6—6	\$5.51 5.62 5.66 5.83 5.89 5.95	\$5.25 5.37 5.40 5.56 5.62	\$6.19 6.34 6.51 6.61 6.69	\$6.25 6.42 6.60 6.78	\$5.55 5.68 5.71 5.89 5.95	\$6.23 6.38 6.56 6.66 6.73	\$6.38 6.52 6.58	\$12.83 13.03 13.12 13.38	78 81 83 85 87
2—6 by 6—8 2—8 by 6—8 2—6 by 7—0 2—8 by 7—0 3—0 by 7—0	5.98 5.98 6.08 6.35 6.53 6.72	5.67 5.70 5.81 6.05 6.15 6.37	6.78 6.82 6.98 7.26 7.42 7.75	6.88 6.93 7.08 7.37 7.53 7.87	6.01 6.05 6.15 6.42 5.60	6.83 6.88 7.03 7.32 7.48	7.01 7.05 7.22 7.51 7.68	13.56 13.60 13.88 14.76 15.06	87 88 90 89 93



FRENCH DOORS have that extra charm no ordinary door can give your home



OFTEN the only difference between a beautiful home and a less attractive one is in the details of the finish. Many ordinary looking houses could be transformed into smart, attractive ones by just a few distinctive finishing features—such as French Doors. They are especially decorative and give the home new character and beauty.

If you are remodeling your home put a pair of French Doors between the hall and living room—leading to your sun porch or terrace—between the living and dining room. Leave them undraped—or hang curtains or net to match the color scheme of your room. A single French Door or Terrace Door is especially attractive when used for the opening onto a screened or sleeping porch. And here's something else-French Doors at the top of your stairs will prevent those chilly drafts that often come down open stairways into the living room.

French Doors are made of clear White Pine, Gum or veneered Red Oak $1\frac{3}{6}$ or $1\frac{3}{4}$ inches thick. Side and top rails are $3\frac{3}{4}$ inches wide; bottom rail $8\frac{3}{4}$ inches. Glazed with double strength glass. T shape Astragal is furnished for center. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia. See page 3 for Estimated Freight Charges.

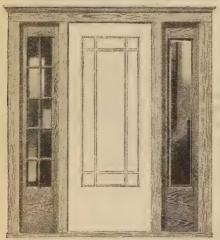
Size of Opening	Whit	e Pine	Red Oak Veneer		All Gum		Ship.
Per Pair	274 H 1152	274 H 470	274 H 1154	274 H 473	274 H 1156	274 H 1150	Wts.
Width Height	13/8 In.	13/4 In.	13/8 In.	13/4 In.	13/8 In.	13/4 In.	Doors
Ft. In. Ft. In.	Thick	Thick	Thick	Thick	Thick	Thick	* `
4-0 x 6-8	\$8.50	\$10.70	\$18.30	\$21.40	\$15.60	\$18.35	140 lbs.
4-0 x 7-0	8.85	11.20	19.10	21.85	16.15	18.90	165 lbs.
5-0 x 6-8	9.30	11.60	19.45	22.20	16.60	19.35	195 lbs.
5-0 x 7-0	9.60	12.15	20.25	22.95	17.15	19.70	210 lbs.

DRIP CAP

HEAD JAMB

SIDE JAMB SIDE

SIDE LIGHTS and FRAME



274 H 452 274 H 451 Sidelight Frame 274 H 615

Sidelights Beautify Your Home
They give a cheery, hospitable look to the front door. Furnished in designs and woods to match our doors. Made of clear Western White Pine 1¾ in. thick. Glazed with Plain Plate Glass. Avg. Ship. wt. 50 lbs.

Article Number	Kind of Wood	Number of Lights	Size 1-2x6-8 Each	Size 1-2x7-0 Each
274 H 452	W.P.	Ten Lights	\$4.10	\$4.25
274 H 451	Oak	Ten Lights	9.35	9.75
274 H 1068		One Light	5.75	6.25
274 H 1069		One Light	9.15	10.00

Special Frames for Sidelights

Decidi Frames to for Sidelights

We supply special Frames to fit Doors and Sidelights—
made of White Pine—cut to size ready, to set up. Outside
casing is 1½ inches thick with moulded cap. Jambs are
1½ by 5½ inches, rabbeted for 1½ or 1½-inch doors and
for 1½-inch sidelights. Be sure to specify thickness of your
door. Average shipping weight 90 pounds.
274 H 615—State Size. Price Frame only.
For door 2 ft. 8 in. by 6 ft. 8 in. Sidelights
1 ft. 2 in. by 6 ft. 8 in. Each.
For door 3 ft. by 6 ft. 8 in. Sidelights 1 ft. 2 in.
by 6 ft. 8 in. Each.
For door 3 ft. by 7 ft. Sidelights 1 ft. 2 in.
by 7 ft. Each.

7.70

For Frames with Oak sill add \$1.00 extra. Frames and Sidelights Shipped Not Prepaid from Chicago, Eastern lowa or Philadelphia.

FRENCH DOOR FRAMES

Frames are for 2 by 4 stud wall outside openings (use jambs, page 74 for interior openings.)

page /4 for Interior Openings.)
White Pine. Outside casing 1½ by 4½ in. Jambs 1¾ by 5¼ in. Rabbeted for doors ½ by 1¾ or 1¾, in. Specify thickness of your door. Sill 1¾ by 7¼ in. Drip cap 1½ by 1¾ in.

If moulded cap is wanted, order under 274 H 614 and add 25c. If Oak Sill is wanted add 75c to prices listed.

Shipped Not Prepaid from Chicago, Eastern Iowa or Phil-

adelphia.	5	ILL
Size of Opening Ft. In. Ft. In.	White Pine	Shipping Weights
4-0 x 6-8 4-0 x 7-0 5-0 x 6-8	\$3.45 3.50 3.70	71 pounds 73 pounds 75 pounds
50 x 70	3.80	77 pounds

MODERN HARDWARE for FRENCH DOORS



Lock Sets

French door hardware should always create a good impression. Here is a very conservative, yet very attractive set—a design of unusual pattern with its narrow and gracefully curved escutcheons—one that is admirably suitable.

eons—one that is admirably sur-ed for all fine homes.

The complete set consists of two escutcheons 6½ by 1½ inch-es. The outside trim has a welles. The outside trim has a well-shaped lever type handle; the inside trim has a glass knob. A strong reversible lock 3½ x 2½. All the necessary screws, and two keys. Dull brass, relieved finish. Shipping weight 2½ pounds. Not Prepaid.

84 H 3085—Complete set..\$1.60

Door Butts

Loose pin has non-rising feature. Screws to match. Size 3½ by 3½ inches. Dull brass finish. Ship, wt. 3 lbs. Not Prepaid. 84 H 3602—Per pair 16c

Flush Bolts

Wrought steel. Plate 61/4 by 11/4 inches; 9-inch rod. Screws included. Dull brass finish. Ship wt. each 5 oz. Not Prepaid. 84 H 3376—Each......\$1.15

TERRACE DOOR



Our Terrace Doors are carried in stock in the sizes listed below. They can be used singly for entrances opening onto porches, sun parlors, etc. Where extra heavy French Doors are wanted these doors can be hung in pairs. We recommend the use of an Astragal when used in pairs. (See page 79 for prices.)

Doors are strongly built for long service. Genuine dowel pin construction using 5-inch hardwood dowels. Furnished unfinished so that you can enamel or stain and varnish to match your woodwork. Glazed with best quality clear glass.

Size of	274 H 1175	274 H 479	274 H 1160
Opening	White Pine	Veneered	Gum
Wdth. Hgt.	1%-inch	Red Oak	1¾-inch
Ft. In. Ft. In.	thick	1¾-in. thick	thick
2-8x6-8	\$5.95	\$13,40	\$11.95
3-0x6-8	6.20	13,85	12.35
3-0x6-8	6.20	13.85	12.35
3-0x7-0		14.40	12.65

Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

It takes only a few FRENCH WINDOWS

to completely transform a room

WARD'S French Windows are made of clear Western White Pine, 1% inches thick, thoroughly seasoned and kiln dried. All joints are mortised and tenoned. They are glazed with best quality clear glass firmly held in place by zinc points and Primeless oil putty. Rabbeted at center stiles to insure a water tight fit. We make them in six popular sizes listed below, each to either swing-in or swing-out as desired. (See illustration at bottom of page for difference of construction.) Shipped in natural wood, smoothly sanded to take any finish.

Shipped promptly Not Prepaid from Chicago, Eastern Iowa

or r made ap			size when or	9		
Size of	Glaz	ing	Price p	Price per Pair		
Opening Width Height Ft. In. Ft. In.		No. of Lights High	274 H 501 Swing-Out Type	274 H 505 Swing-In Type	Average Ship. Wt. Lbs.	
2— 8 by 2—6 2— 8 by 3—0	8	4 4	\$2.43 2.67	\$2.56	19	
2— 8 by 3—6 2— 8 by 4—0	8	4	2.82	2.95	22 24	
2-10 by 4-6	. 10	5	3.00 3.47	3.13 3.86	27 29	
2—10 by 5—2	10	5	3.82	4.20	33	





CASEMENT SASH



Ward's Casement Sash are identical in construction with our French Windows. Made of the same high quality seasoned clear western White Pine carefully machined and smoothly sanded, they take a splendid finish, either stain and varnish, paint or enamel. They have the same fine glazing and all the other quality construction features of our French Windows.

Ward's low price is possible only.

tures of our French Windows.

Ward's low price is possible only because we sell large quantities giving you the benefit of our savings and ship them to you direct from the mill with all in-between profits eliminated. Furnished in pairs rabbeted to swing-in or to swing-out. All full 1½ inches thick. Shipped Not Prepaid from Chicago, Eastern lowa or Philadelphia, Pa. State size when ordering.

Easy Payments See Page 4
Estimated Freight
Charges See Page 3

Size of	274 H 503	274 H 502	Average
Opening	Swing Out	Swing In.	Ship.
Width Height	Price	Price	Wt.
Ft. In. Ft. In.	Per Pair	Per Pair	Lbs.
2—8 by 2—6	\$2.17	\$2.27	19
2—8 by 3—0	2.40	2.50	22
2—8 by 3—6	2.56	2.65	24
2—8 by 4—0	2.74	2.83	27

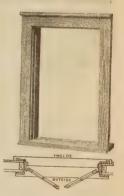
Frames for FRENCH WINDOWS COLONIAL and CASEMENT SASH

Made of clear Western White Pine. Outside casing is 1½ by 4½ inches. Stiles and head jambs 1½ by 5½ inches. Frames for in-swinging sash only have jambs and heads rabbeted ½ by 1½ inches to receive sash. Sills are 15½ inches thick and 7½ inches wide. See detail sketch below for construction of sills. Drip cap is 1½ by 1½ inches by 15/8 inches.

These Frames are for 2 by 4 stud frame wall construction. The illustration at the right shows frame for sash to swing-out. Cross section below illustration shows how sash are hung to swing-out.

Shipped Not Prepaid from Chicago. Eastern Iowa r Philadelphia. State size when ordering.

			0.
Size of Opening Width Height Ft. In. Ft. In.	274 H 627 Frames for Sash to Swing Out	274 H 674 Frames for Sash to Swing In	Avg. Ship. Wt. Lbs.
2— 4 by 2—1 2— 4 by 2—5 2— 4 by 2—9 2— 8 by 2—8 2— 8 by 3—0 2— 8 by 3—6 2— 8 by 4—0 2—10 by 4—6 2—10 by 5—2	\$1.53 1.61 1.71 1.85 2.03 2.16 2.38 2.56 2.75	\$1.71 1.81 1.91 2.04 2.23 2.39 2.60 2.83 3.09	15 15 18 18 22 22 26 30 35



Write for special prices on Frames for Brick, Stone, Brick Veneer or Stucco con-

COLONIAL SASH







For those little windows in the hallway—on each side of the fireplace—on the stairway anding—you'll find Ward's Colonial Sash are just the thing. Made of clear Western White Pine full 1½ inches thick. Same fine construction as our French Windows. Can be used as stationary or swinging windows. Furnished to swing-in or to swing-out (see construction details at right). Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia. State size when ordering.

Size of		rim	Plyn	nouth	Δ
Opening Width Height Ft. In. Ft. In. 2—4 by 2—1 2—4 by 2—5 2—4 by 2—9	Swing Out 274 H 512 Price Each 94c \$1.03 1.12	Swing In 274 H 555 Price Each \$1.02 1.11 1.20	Swing Out 274 H 511 Price Each \$1.09 1.17 1.27	Swing In 274 H 543 Price Each \$1.17 1.25 1.35	Average Ship. Wt. Lbs.



All Ward's Sash and Frames are ABSOLUTELY WATER-TIGHT





Frame for Sash to Swing-In

Frame for Sash to Swing-Out



The bottom rail of Sash to swing-in is rabbeted to fit over edge of sill as shown. A half round groove is cut in the bottom of the sash and in the top of the sill. Any water blown in between sash and sill must fall into this groove and drain to the center of sill where a slot allows it to run out. This construction makes Ward's in-swinging sash absolutely water tight. Note also the water tight construction of sash to swing-out.

re you paying for STORM SASH



As good as modern craftsmanship and high grade materials can make them. Yet notice our low prices.

them. Yet notice our low prices.

Clear Western White Pine 1½ inches thick, with side and top rails 2 inches wide and bottom rails 4½ inches wide. Glazed with strong clear glass. Ventilators furnished in bottom rail for 15c extra. If your window opening is only ½-inch narrower or 1½ inches shorter than openings listed, order stock size and cut down to fit.

Alwans extra width first Shipped

Always state width first. Shipped Not Prepaid from mills in Chicago, Eastern Iowa or Philadelphia. See page3 for Estimated Freight Charges.

Size of	Size of Opening	Shipping	274 H 556
	Width Height	Weight	Price
Glass	Ft. In. Ft. In.	Pounds	Each
12x20 inches	1-4 x 3-11½	13	91c
14x20 inches	1-6 x 3-11/2 1-6 x 4-7/2 1-6 x 4-11/2	. 14	97c
14x24 inches	1-6 x 4-71/2	14	\$1.09
14x26 inches	1- 6 x 4-11/2	15	1.13
14x28 inches	1 6 x 5 31/2	15	1,27
16x20 inches	1-8 x 3-11/2	15 17 17	1.05
16x24 inches	1-8 x 4-71/2	17	1.14
16x26 inches	1- 8 x 4-11/2	17	1.30
16x28 inches	1 8 x 5 3½	18 1	1.35
16x30 inches	1— 8 x 5— 3½ 1— 8 x 5— 7½	19	1.41
18x20 inches	1-10 x 3-111/2	15	1.11
18x22 inches	1-10 x 4- 316	16	1.25
18x24 inches	1-10 x 4- 71/2	îř	1.30
18x26 inches	1—10 x 4— 7½ 1—10 x 4—11½ 1—10 x 5— 3½ 1—10 x 5— 7½	9 18	1.37
18x28 inches	1-10 x 5-31/2	19	1.42
18x30 inches	1-10 x 5- 71/2	20	1.53
	1-10 x 3- 7/2		
20x20 inches	2-0 x 3-11/2	18	1.16
20x22 inches	2-0 x 4- 3½	19	1.30
20x24 inches	2— 0 x 3—11½ 2— 0 x 4— 3½ 2— 0 x 4— 7½	. 19	1.31
20x26 inches	2-0 x 4-11 1/2	20	1.36
20x28 inches	2-0 x 5- 3½	21	1.42
20x30 inches	2-0 x 4-11/2 2-0 x 5-31/2 2-0 x 5-7/2	22	1.56
22x24 inches	2- 2 - 4- 716	20	1.39
22x24 inches	2— 2 x 4—11½ 2— 2 x 5— 3½ 2— 2 x 5— 7½	21	1.46
22x28 inches	2- 2 x 5- 31/2	22	1.55
22x30 inches	2— 2 x 5— 3½ 2— 2 x 5— 7½	23	1.67
	2 2 2 3 772		
24x16 inches	2— 4 x 3— 3½ 2— 4 x 3— 7½ 2— 4 x 3—11½	19	1.08
24x18 inches	2- 4 x 3- 71/2	. 20	1.22
24x20 inches	2-4 x 3-111/2	21	1.26
24x22 inches	2-4 x 3-11½ 2-4 x 4-3½ 2-4 x 4-7½	22 23	1.39
24x24 inches	2-4 x 4- 71/2	23	1.43
24x26 inches	2-4 x 4-111/2	24	1.46
24x28 inches	2-4 x 4-11½ 2-4 x 5-3½ 2-4 x 5-7½	25	1.55
24x30 inches	2-4 x 5- 7½	26	1.66
26x14 inches	2— 6 x 2—11½ 2— 6 x 4— 7½ 2— 6 x 4—11½ 2— 6 x 5— 3½ 2— 6 x 5— 7½	23	1.12
26x24 inches	2- 6 x 4- 71/2	24	1.48
26x26 inches	2- 6 x 4-111/2	24	1.55
26x28 inches	2 6 x 5 31/2	24 25	1.70
26x30 inches	2— 6 x 5— 7½	26	1.83
	0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
28x24 inches	2-8 x 4-71/2	.24	1.60
28x26 inches	2-8 x 4-11/2	25 26	1.70
28x28 inches	2 8 x 5 3½	26	1.79
28x30 inches	2 8 x 5 71/2	27	1.83
28x32 inches	2— 8 x 4— 7½ 2— 8 x 4—11½ 2— 8 x 5— 3½ 2— 8 x 5— 7½ 2— 8 x 5—11½	28	2.61
30x24 inches	2-10 x 4- 71/2	26	1.66
30x26 inches		26	1.83
30x28 inches	210 x 5 31/2	27	1.86
30x30 inches	2-10 x 5- 71/2	28	2.47
30x32 inches	2-10 x 4-11½ 2-10 x 5-3½ 2-10 x 5-7½ 2-10 x 5-1½	29	2.70
	$\frac{3-0 \times 4-7 \frac{1}{2}}{3}$		
32x24 inches	3-0 x 4-71/2	30	1.95
32x28 inches	3-0 x 4- 7½ 3-0 x 5- 3½ 3-0 x 5- 7½	32	2.61
32x30 inches	$3-0 \times 5-7\frac{1}{2}$	34	2.70
38x20 inches	3-6 x 3-111/6	27	2.75
38x24 inches	3-6 x 4-7 7 1/2	28	2.76 .
38x26 inches	3-6 x 4-111/2	31	3.02
38x28 inches	3-6 x 5-31/3	33	3.36
Market Control of the	3 0 5 21/2		
40x28 inches	3— 8 x 5— 3½	33	3.37
40x30 inches	3— 8 x 5— 7½	. 35	3.40
44x28 inches	3— 8 x 5— 3½ 3— 8 x 5— 7½ 4— 0 x 5— 3½ 4— 0 x 5— 7½	. 39	4.40
44x30 inches	$4-0 \times 5-7\frac{1}{2}$	41	4.75

The EXTRA MONEY you spend for fuel will BUY a Complete SET

YOU'LL save enough in the first year alone to pay a big part of your Storm Sash bill . . . and after they have paid for themselves they will go on saving you money in fuel bills for years to come. So why not enjoy the comforts of warm, easily heated rooms NOW instead of putting up with a chilly, drafty, hard to heat home that may cause sickness?

Zero weather-icy blasts-angry storms of sleet and snow hold no terror for folks who equip their homes with Ward's Storm Sash. Their homes are warm and cozy no matter how cold the wind blows.

How Ward's Storm Sash Cut Coal Bills

The Department of Commerce, Bureau of Standards at Washington, D. C., after a thorough investigation of Storm Sash, reports as follows: "Storm Sash on a weatherstripped house will save 25 to 30 per cent on the cost of fuel." This saving makes the money you spend for Storm Sash a profitable investment. It's easy to see why a saving of 25% to 30% on fuel costs is possible when you look at the picture at right. Without storm sash, the cold air subling against the outside of the class chile it and began at the content of the content of the class chile it and began at the content of the content of the class chile it and began at the content of the class chile it and began at the content of the class chile it and began at the content of the class chile it and began at the content of the class chile it and began at the content of the class chile it and began at the content of the class chile it and began at the content of the class chile it and the content of th rushing against the outside of the glass chills it and lowers the temperature of the room near the window 10 to 15 degrees.

Storm Sash forms a dead air space between the two thicknesses of glass serving as a blanket of insulation between the cold outside and the warm room inside.

If your home is chilly, drafty and hard to heat a new storm door will shut out the cold air that slips in under regular doors. It will prevent drafts, fuel wastes, and much of the discomfort of a chilly house.

Ward's Storm Doors will insulate your entrance doors in the same manner that storm sash insulate windows. As a result, your entry hall will be as warm and cozy as the rest of your home.

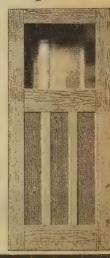
At Ward's low price you can have this efficient, heavy duty door for so little that we feel it's an investment you will surely want to take advantage of. The savings in fuel alone will soon repay the cost.

Our doors are strongly built of clear Western White Pine. Full $1 \frac{1}{8}$ inches thick. Furnished a little larger than stock door sizes, so they can be trimmed down to make a perfect fit. Shipped to you in natural wood smoothly sanded, ready for varnish or paint.

Width	Height	Shipping Weight	274 H 484 Price Each
2 ft. 6 in.	6 ft. 7 in.	54 lbs.	\$3.50
2 ft. 8 in.	6 ft. 9 in.	59 lbs.	3.65
2 ft. 8 in.	7 ft. 1 in.	62 lbs.	3.85
3 ft. 0 in.	6 ft. 9 in.	62 lbs.	3.90
3 ft. 0 in.	7 ft. 1 in.	68 lbs.	4.05

Shipped Not Prepaid from Mills in Chicago, Eastern Iowa or Philadelphia. Estimated Freight Charges on page 3.

INSULATING AIRSPACE

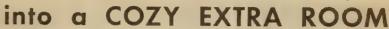


FOUR-LIGHT STORM

Same quality and construction	as our 2-li	ght Storm	Sash.	
Shipped Not Prepaid from	Chicago,	Eastern Id	owa or Ph	iladelphia.
				OTA TY FOO

Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	Shipping Weight Pounds	274 H 562 Clear Glass
10x20 inches	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	36	\$1.28
10x22 inches		38	1.34
10x24 inches		40	1.35
10x26 inches		41	1.49
10x28 inches		42	1.50
12x20 inches 12x22 inches 12x24 inches 12x26 inches 12x26 inches 12x28 inches 12x30 inches	2— 5 x 3—11½ 2— 5 x 4— 3½ 2— 5 x 4— 7½ 2— 5 x 4—11½ 2— 5 x 5— 3½ 2— 5 x 5— 7½	38 40 42 43 44 45	1.26 1.42 1.43 1.52 1.57 1.86
14x20 inches	2-9 x 3-11½ 2-9 x 4-3½ 2-9 x 4-7½ 2-9 x 4-11½ 2-9 x 5-3½ 2-9 x 5-7½ 2-9 x 5-1½ 2-9 x 5-1½ 2-11 x 4-7½	40	1.50
14x22 inches		42	1.63
14x24 inches		44	1.65
14x26 inches		45	1.70
14x28 inches		46	1.90
14x30 inches		47	2.00
14x32 inches		49	2.17
15x24 inches		44	1.78

See how little it costs to TURN YOUR COLD PORCH



Ward's Experts Will Figure Your PORCH ENCLOSURE for You Without Obligation

N WINTER a cozy warm room, all enclosed in glass with bright sunlight streaming in every window. In summer a cool airy spot with screens to keep out flies and mosquitoes. What a healthy place for children and grown folks to live in . . . and that's just what you'll do . . . you'll live in it. The sun porch will be the most popular room in the house.

You'll be surprised how little it costs, when you buy your materials from Wards. Here are some figures to give you an idea of just how little you have to spend to completely enclose your porch

For a porch	6 feet by 10 feet	approximately	 er April	\$27.50
For a porch	8 feet by 16 feet	approximately	 	42.00
For a porch	9 feet by 20 feet	approximately	 	52.00

The above prices are only average, of course. Every porch is different and the price varies more or less depending upon the size, the type of materials selected and other specifications.

Free Estimate Without Obligation

If you wish, Ward's Engineering and Information Department will gladly furnish you with a free estimate on the cost of all materials for completely enclosing your porch. We will give you suggestions for the most appropriate design and help you with the selection of proper materials. When writing send three sketches like those shown at the left, giving us complete dimensions, including distance between posts, height and type of railing as well as width, height and length of porch. Tell us the construction of your house, whether you want the windows to extend to the floor or porch rail, how you want the railing covered on the outside and if we should include screens for use in summer. Send a snapshot picture of your porch if possible. Give us as much information as you can.

If you do not wish to pay all cash, Ward's generous Easy Payment Plan en ables you to enjoy the comforts of a porch enclosure while you are paying for it. A down payment of \$3.50 to \$5.00 will insure delivery of almost any enclosure.

PORCH ENCLOSURE SASH





Left End View

Front View

Right End View

8 AND 12 LIGHT STORM SASH







F YOU have 8 or 12-light windows in your home you will want this style of Storm Sash. They are made to same specifications as our 2-light Storm Sash on opposite page. You can depend upon them to stand up under many years of hard usage.

These designs are also very popular for Porch Enclosures. Our Engineering and Information Department Ventilators furnished in bottom rail of all Storm and Porch Enclosure Sash at cost of 15c extra.

274 U 564 9 Light Ston

	27 11 301 - 3 Light Storm Sash				
Size of Glass	Size of Opening Feet Inches Feet Inches	Price Each			
9 by 12 10 by 12 10 by 14 12 by 14 12 by 16	1—11 by 4— 7½ 2— 1 by 4— 7½ 2— 1 by 5— 3½ 2— 5 by 5— 3½ 2— 5 by 5—11½	\$1.26 1.27 1.43 1.59 1.84			

will be glad to give you complete information on how to use this type of Storm Sash for Porch Enclosure pur-

When ordering by glass size, give size in inches. When ordering by opening size, give size in feet and inches. Always give width first. Average ship. wt. 30 lbs. For Estimated Freight Charges, See Page 3.

274 H 566-12 Light Storm Sask

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		out and an entering the contract c	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
	8 by 12 9 by 12 9 by 14 10 by 12 10 by 14	2— 4½ by 4— 7½ 2— 7½ by 4— 7½ 2— 7½ by 5— 3½ 2— 7½ by 5— 3½ 2—10½ by 4— 7½ 2—10½ by 5— 3½	1.46 1.55 1.75 1.61 1.78

Shipped Not Prepaid from Mill in Chicago, Eastern Iowa or Philadelphia, Pa. For Easy Payments see our Budget Plan on Page 4.

A very popular type of porch enclosure sash. Made of Clear Western White Pine full 1% inches thick and glazed with best quality clear glass. Average shipping weight 30 pounds. When ordering give size in feet and inches. Give width first.

Size of Opening Feet Inches Feet Inches	274 H 599 Price Each
1—10 ¼ by 4—5 ¾ 2— 0 ¼ by 4—5 ¾ 2— 2 ¼ by 4—5 ¾ 2— 4 ¼ by 4—5 ¾ 2— 6 ¼ by 4—5 ¾ 1—10 ¼ by 5—1 ¾ 2— 0 ¼ by 5—1 ¾ 2— 2 ¼ by 5—1 ¾ 2— 4 ¼ by 5—1 ¾ 2— 4 ¼ by 5—1 ¾ 2— 4 ½ by 5—1 ¾	\$1.58 1.60 1.70 1.73 1.82 1.75 1.77 1.86 1.91 2.03

Shipped Not Prepaid from Mill in Chicago, Eastern owa or Philadelphia, Pa.



	0) (0		1
Size	Size of Frame	274 H 780	274 H 781
of	Opening Width Height	Fach-with	Each—with
Glass	Ft. In. Ft. In.	Gal. Wire	Bronze Wire
12x20	1- 4x3-11½	71c 78c	90c
14x20	1- 6x3-111/2	78c	\$1.07
14x24	$1-6x4-7\frac{1}{2}$	80c	1.09
14x26	1- 6x4-111/2	84c 87c	1.15 1.19
14x28	$1-6x5-3\frac{1}{2}$		
16x20	1- 8x3-111/2	77c	1.04 1.16
16x24	1- 8x4- 7½ 1- 8x4-11½	84c 87c	1.10
16x26 16x28	1- 8x5- 3½	92c	1.22
16x30	1- 8x5- 3½ 1- 8x5- 7½	95c	1.33
18x20	1-10x3-111/6	80c	1.12 1.17
18x22 18x24 18x26 18x28	$1-10x4-3\frac{1}{2}$	84c	1.17
18x24	1-10x4- 7½	87c	1.23
18x26	1-10x4-11½	92c 95c	1.31
18x28 18x30	1-10x5- 3½ 1-10x5- 7½	99c	1.36 1.42
			1.17
20x20 20x22	2- 0x3-11½ 2- 0x4- 3½	83c 87c	1.23 1.31 1.38
20x24	2- 0x4- 71/2	92c	1.31
20x26	2- 0x4-111/2	92c 95c	1.38
20x28 20x30	2- 0x5- 3½ 2- 0x5- 7½	99c	1.44
		\$1.04	1.51
22x24	2- 2x4- 7½ 2- 2x4-11½ 2- 2x5- 3½ 2- 2x5- 7½	95c	1.39 1.46
22x26 22x28	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	99c \$1.02	1.54
22x30	$\frac{2}{2} - \frac{2}{2} \times 5 - \frac{3}{7} \frac{7}{2}$	1.07	1.61
24x16	2- 4x3- 31/2	81c	1.16
24v18	2- 4x3- 3½ 2- 4x3- 7½	86c	1 23
24x20	2- 4x3-111/2	89c	1.31
24x20 24x22 24x24	2- 4x4- 3½ 2- 4x4- 7½	93c	1.39
24x24	2- 4x4- 7½ 2- 4x4-11½	98c	1.46 1.54
24x20	2- 4x4-11½ 2- 4x5- 3½	\$1.02 1.07	1.62
24x26 24x28 24x30	2- 4x4-11½ 2- 4x5- 3½ 2- 4x5- 7½	1.10	1.62 1.70
26x14	2 6 2 111/	83c	1.13
26x24	2- 6x4- 71/2	\$1.06	1.54
26x26	2- 6x4-111/2	1.12 1.16	1.61
26x28 26x30	2- 6x5- 3½ 2- 6x5- 7½	1.20	1.70 1.78
28x24	2- 8x4- 71/2	1.11	1.61
28-26	2_ 8~1_1114	1 1 1 5	1.70 1.78 1.87
28×28 28×30	$2 - 8x5 - 3\frac{1}{2}$	1.22	1.78
28x30	2- 8x5- 7½	1.26	1.87
28x32	2- 8x5-11½	1.32	1.96
30x24	2-10x4- 7½ 2-10x4-11½	1.16	1.67 1.75
30x20	2-10x4-11/2 2-10x5- 31/2	1.20 1.26	1.86
30x26 30x28 30x30	2-10x5- 7½	1.30	1.94
30x32 32x24 32x28	2-10x5-111/2	1.54	2.04
32x24	3- 0x4- 71/2	1.19	1.75
32x28	3- 0x5- 3½	1.30	1.94
32x30	3- 0x5- 7½ 3- 6x3-11½	1.35 1.18	2.04 1.77
38x20 38x24		1.32	1 1 00
38x24	3_ 6v4_1116	1.38	2.10
38x28	3- 6x5- 31/6	1.44	2.10 2.20 2.31 2.42 2.49
40x28	3- 8x5- 31/2	1.44 1.50 1.56	2.31
40x30	3- 8x5- 71/2	1.56	2.42
44x28 44x30	4- 0x5- 3½ 4- 0x5- 7½	1.61 1.65	2.58

3 reasons why WARD'S SCREENS give you MORE for your money!

- We Build them with Strong Mortise and Tenon Joints—securely held with steel pins though other screens may sag and loosen after one season . . . Ward's Stay Sturdy.
- We Specify None but the Best Clear Western White Pine Lumber.
- We insist on 16-mesh Rust Resistant Wire . . . no wonder you get Extra Service.

Then we make all our window screens full 11/4 inches thick to give them extra strength and 11/4 inches longer than our standard window frames to allow for fitting and for use with subsill frames.

You'll Really Get the Good Out of Your Porch if You Enclose It!



Write for Free Estimate

Buy On Easy Payments See Page 4

Let our staff of expert estimators tell you how little it will cost to completely enclose your porch with high quality screens. Just send us a sketch of your porch with complete measurements. See page 67 for Estimates on Porch Enclosures.

Address your request to our Engineering and Information Department and you will be sent a Free estimate, including all transportation charges to your station. You'll be surprised at the money we can save you.

Our Fine 16-Mesh Wire Is the Despair of Insect Pests

Ward's Prices Are **About What Others** Ask for Screens With **Ordinary Wire**

Flies, insects and mosquitoes that carry disease just can't get into your home through 16mesh wire. It means complete protection and comfort.



You have a choice of either rust-resisting galvanized steel wire or the finest rust-proof copper bronze wire. Of course, the copper bronze costs a little more, but it lasts longer.

This is just another instance of the fine quality put into all Ward's building materials.

WHY LOOK FURTHER AND PAY MORE?



For Easy Payments See Page 4

12 Mesh



For **Estimated** Freight Charges See Page 3

14 Mesh



. . . Then Designed Two Better Doors 40% Thicker and Stronger

We Built a Really Good Screen Door to Sell for Practically No Money at All...

What a value! You'll look a long time before you match this quality at anywhere near Ward's low price. A well made screen door in every respect. Clear Yellow Pine full %-inch thick. Stiles are 3 inches wide. Blind mortised and tenoned joints. Furnished with 12-mesh black wire screen cloth tightly stretched and firmly held with flush molding. Finished with two coats of good varnish. shed with two coats of good varnish. Shipped Not Prepaid from stock. 174 H 1045-State size

Width Ft. In.	Height Ft. In.	Ship. Wt.		Each
2- 6 2- 8 2-10 2-10 3- 0	6- 8 6-10 7- 0	19 20 20 ½ 21 21 ½	lbs. lbs. lbs. lbs. lbs.	\$1.49 1.59 1.79 1.85 1.89

.... Made to Last for Many Seasons!

Although extra strong and sturdy, you'll find that Ward's low price means a big saving for you. Made of clear Western White Pine full 1½ inches thick with 3-inch stiles. Covered with 14-mesh galvanized screen cloth, tightly stretched and firmly held with flush molding. Blind mortised and tenoned joints. Finished with two coats of high grade varnish. grade varnish.

Shipped Not Prepaid from stock 174 H 1046-State size.

Width	Height	Ship.	Each
Ft. In.	Ft. In.	Wt.	
2- 6 2- 8 2-10 2-10 3- 0	6- 8 6-10 7- 0	20 lbs. 20½ lbs. 21 lbs. 21½ lbs. 21½ lbs. 22 lbs.	

A beauty! Extra strong, too, for those added seasons of service. Made of clear Western White Pine, full 1½ inches thick with 4-inch stiles. These extra wide, thick rails help make this door strong and sturdy. Solid panel insert. Extra fine 16-mesh galvanized wire, tightly stretched and firmly held with molding. Blind mortised and tenoned joints. Finished with two coats of good quality varnish.

Shipped Not Prepaid from stock 174 H 1047-State size.

Width	Height	Ship.	Each
Ft. In.	Ft. In.	Wt.	
2- 8		20 ½ lbs.	\$2.69
2-10		21 lbs.	2.79
2-10		21 ½ lbs.	2.85
3- 0		22 lbs.	2.95

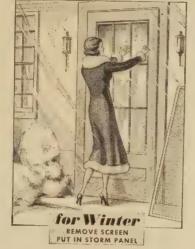
EASY PAYMENTS . . . See Page 4

Here's how Ward's COMBINATION STORM and SCREEN DOOR

Works the Year Around to your Advantage . . .

- 1. You save the price of one door
- 2. Change from Screen to Storm Door in 5 minutes
- 3. You need never take the door itself off its hinges!





A COMBINATION Door is in use all the year around—it provides the protections of a fine screen door in the summer and a dependable storm door in the winter. It's a time-saving and space-saving door—the kind everyone wants. That's why Ward's has made an extra fine one at an extra low price.

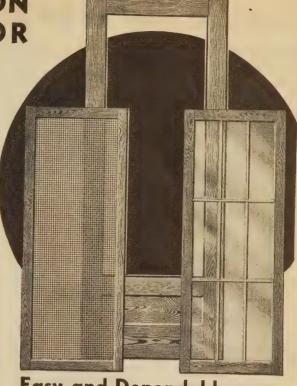
The frame is full 11/2 inches thick, carefully and expertly constructed of selected, kiln-dried, clear Western White Pine, smoothly sanded ready to paint. Stiles, 43/2 inches wide, firmly mortised, enoned, pinned and glued, make this a much turdier door than ordinary screen or storm doors.

In summer you use the screen panel in this sturdy frame. To give your home complete protection from flies and mosquitoes, we've made this screen of 16-mesh wire. Small insects that enter through ordinary 12 or 14 mesh wire, just can't set in can't get in.

When winter winds begin to blow, it's just a five minute job to take out the screen and put in the storm panel which is glazed with strong, clear glass. Then you have a storm door that keeps chilly drafts out of your home.

Shipped Not Prepaid from Stock. Estimated Freight Charges on Page 3.

Openin	g Size	174 H 483 .	174 H 482	
Width	Height	16 Mesh Galvanized Wire	16 Mesh Bronze Wire	Ship. Wt. Each
2 ft. 6½ in. 2 ft. 8½ in. 2 ft. 8½ in. 2 ft. 10½ in. 2 ft. 10½ in. 3 ft. ½ in. 3 ft. ½ in.	6 ft. 7 in. 6 ft. 9 in. 7 ft. 1 in. 6 ft. 11 in. 7 ft. 1 in. 6 ft. 9 in. 7 ft. 1 in.	\$4.40 4.60 4.90 4.95 5.00 5.00	\$4.65 4.85 5.15 5.20 5.25 5.25 5.35	77 lbs. 85 lbs. 95 lbs. 90 lbs. 95 lbs. 93 lbs. 99 lbs.



Easy and Dependable Fastener Adjustments

Hold Panels—They Can't Loosen and Rattle

Only a screw driver and a few minutes of your time are required to substitute the glass panel for the screen or vice versa. The four Fastener Adjustments on the frame enable this quick and easy change. They are located on the inside and cannot be tampered with from outside.

One-quarter turn of the screw re-leases the screen or glass panel—one-quarter turn back locks it to the frame securely and rigidly. It cannot rattle— it cannot come loose.



MATERIAL for MAKING SCREENS

Knockdown Screen Frames

take your own Window Screens and we money! And because of Ward's tra low prices, you can save still ore—considerably more. Just compute these prices with others and see r yourself the money you save.

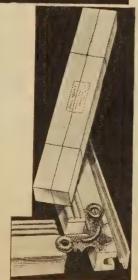
Tyourself the money you save.
These Screen Frames are made of lected clear White Pine ¹³/₁₆ inches ick by 13/₂ inches wide. Each frame cludes two side runners which fasten window frames; 2 side rails; a top and ttom rail; four brackets to brace corrs securely; mitered moulding to hold reen in place and all the necessary ils and screws.

The Frames and accessories are safely closed in a handy carton (shown at tht) for your convenience.

Mailable. Shipped Not Prepaid om Stock. Include Postage with om Stoci

Art. No.		Ship. Wt.	Each
4 VH 1016	30 by 30	31/4 lbs.	27c
4 VH 1017 4 VH 1018	36 by 36 48 by 48	3½ lbs. 4 lbs.	33c 45c
4 VH 1019	42 by 84	7 lbs.	69c

See Our General Catalog for a emplete Line of Black, Galvanized d Copper Screen Wire.



8 and 12 LIGHT WINDOW SCREENS

Made to fit standard 4, 8 and 12-Light Windows. Manufactured from finest quality clear Western White Pine—the same high quality and construction as our 2-Light Screens on the opposite page.

Will not sag or warp as ordinary screens do. Furnished smoothed and sanded ready for paint-ing or varnishing. Average shipping weight each, 15 pounds.

Screens to Fit 4-Light Windows

Management	Size of Opening Width Height Ft. In. Ft. In.	274 H 782 Each — With 16 Mesh Gal- vanized Wire	274 H 783 Each — With 16 Mesh Cop- per Bronze Wire
10x20 10x22 10x24 10x26 10x28	2—1 x 4—3½ 2—1 x 4— 7½ 2—1 x 4—11½ 2—1 x 5— 3½	86c 89c 93c 98c \$1.02	\$1.20 1.28 1.33 1.41 1.48
12x20 12x22 12x24 12x26 12x28	2-5 x 4-3 1/2 2-5 x 4-7 1/2 2-5 x 4-11 1/2 2-5 x 5-3 1/2	92c 96c \$1.01 1.05 1.10	1.35 1.44 1.51 1.60 1.67
12x30 14x20 14x22 14x24 14x26 14x28	2—5 x 5— 7½ 2—9 x 3—11½ 2—9 x 4— 3½ 2—9 x 4— 7½ 2—9 x 4—11½ 2—9 x 5— 3½	1.14 98c \$1.04 1.08 1.13 1.17	1.75 1.48 1.57 1.65 1.74 1.83
14x30 14x32	2-9 x 5-71/2	1.23	1.91

· Shipped Not Prepaid from Mills in Chicago, Eastern Iowa or Philadelphia.

Screens to Fit 8-Light Windows

		g 111	1140113
	Size of Opening Width Height Ft. In. Ft. In.	274 H 784 Each—With 16 Mesh Galvanized Wire	274 H 785 Each—With 16 Mesh Copper Bronze Wire
10x14 12x14		95c \$1.02 1.08 1.15 1.21	\$1.28 1.35 1.47 1.62 1.70

Shipped Not Prepaid from Mills in Chicago, Eastern Iowa or Philadelphia.

Screens to Fit 12-Light Windows

		3	
Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	274 H 786 Each—With 16 Mesh Galvanized Wire	274 H 787 Each—With 16 Mesh Copper Bronze Wire
10x14	2- 4½ × 4- 7½ 2- 7½ × 4- 7½	\$1.08 1.15 1.20 1.23 1.27 1.35 1.44	\$1.40 1.49 1.60 1.65 1.71 1.87 1.95

Shipped Not Prepaid from Mills in Chicago Eastern Iowa or Philadelphia.

Easy Payments

Buy this convenient way—see our Budget Plan on Page 4.

You can buy WINDOWS anywhere ... but not

These Windows Come in Complete Sets

THIS UNUSUAL Combination Offer includes—attractive two-light window shown at left—plain cap White Pine frame (No. 274 H 623) with 11/8 in. Outside Casings and jam-proof pulleys—neatly designed interior Craftsman trim of clear Yellow Pine—four cast iron sash weights—two dull brass sash lifts and fastener and all the necessary sash cord. You save time in ordering. You get everything you need at one time-from one place-at one low, moneysaving price. And you save money on freight charges-because we ship everything direct to you from the mill with all in-between profits eliminated.

The windows are made of clear Western White Pine, thoroughly seasoned and scientifically kiln-dried. Full 13/8 inches thick with check or meeting rail where the upper and lower sash come together (see inset below). Strong mortise and tenon joints. All surfaces are carefully machined and sanded, ready to be finished. Best quality clear glass held by zinc points and high grade putty. Side rails are plowed and bored for sash cord.

For complete description of Frames and Interior Trim see pages 75 and 76. State width first. Shipped from Chicago, Eastern Iowa or Philadelphia



Hardware included in Complete Window Sets

Above is an interior view, showing Wards' Two Light Window finished vith atractively designed Craftsman ackband trim.		
In most cases small windows such is illustrated have only one sash lift— out we furnish two with each set egardless of the size.		
The exterior view at the right shows he same window set in a blain cab	100	

Both the Craftsman Trim and the plain cap Frame are part of our special Window Set offer.

		Window	only	Complet	e Set			Window	only	Complete	Set
Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	274 H 518 Window with Clear Glass	Ship. Wt. Lbs.	274 H 1200 Window, Frame, Trim, Cord, Weights, Hardware	Ship. Wt. Lbs.	Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	274 H 518 Window with Clear Glass	Ship. Wt. Lbs.	274 H 1200 Window, Frame, Trim, Cord, Weights, Hardware	Ship. Wt. Lbs.
12x20	1- 4x3-10	96c	13	\$4.21	82	24x24	2- 4x4- 6	\$1.50	22	\$5.32	100
14x20	1- 6x3-10	\$1.01	14	4.29	84	24x26	2→ 4×4-10	1.52	23	5.57	102
14x24	1- 6x4- 6	1.13	15	4.62	86	24x28	2- 4x5- 2	1.62	27	5.82	110
14x26	1- 6x4-10	1.17	16,	4.85	88	24x30	2- 4x5- 6	1.74	29	6.04 4.60	114 88
14x28	1- 6x5- 2	1.33	18	5,08	92	26x14	2- 6x2-10	1.17	16 23	5.54	102
16x20 16x24	1- 8x3-10 1- 8x4- 6	1.09	14	4.41	84 88	26x24 26x26	2- 6x4- 6 2- 6x4-10	1.55 1.62	25	5.75	106
16x24	1- 8x4-10	1.35	17	5.06	90	26x20 26x28	2- 6x4-10 2- 6x5- 2	1.77	29	6.05	114
16x28	1- 8x5- 2	1.41	18	5.19	92	26x30	2- 6x5- 6	2.25	31	6.59	118
16x30	1- 8x5- 6	1.47	18	5.35	92	28x24	2- 8x4- 6	1.66	25	5,81	106
18x20	1-10x3-10	1.16	15	4.60	86	28x26	2- 8x4-10	1.77	29	6.06	114
18x22	1-10x4- 2	1.30	16	4.80	84	28x28	2- 8x5- 2	2.20	30	6,55	116
18x24	1-10x4- 6	1.35	18	4.92	92	28x30	2- 8x5- 6	2.25	32	6.67	120
18x26	1-10x4-10	1.42	19	5.21	94	28x32	2- 8x5-10	2.72	33	7.40	122
18x28	1-10x5- 2	1.48	20	5.34	96	30x24	2-10x4- 6	1.73	27	5.97	110
18x30	1-10x5- 6	1.59	21	5.51	98	30x26	2-10x4-10	2.25	28	6.58	108
20x20	2- 0x3-10	1.20	17	4.68	90	30x28	2-10x5- 2	2.28	30	6.72	116
20x22	2- 0x4- 2	1.35	18	4.89	92	30x30	2-10x5- 6	2.58	34	7.08	124
20x24	2- 0x4- 6	1.36	19	5.01	94	30x32	2-10x5-10	2.81	36 28	7.57 6.73	112
20x26 20x28	2- 0x4-10 2- 0x5- 2	1.42 1.48	21 23	5.29	98	32x24 32x28	3- 0x4- 6	2.39	33	7.30	122
20x28 20x30	2- 0x5- 6	1.63	24	5.46 5.67	104	32x20	3- 0x5- 2 3- 0x5- 6	2.81	36	7.50	130
22x24	2- 2x4- 6	1.45	21	5.23	98	38x20	3- 6x3-10	2.87	30	7.47	116
22x26	2- 2x4-10	1.52	22	5.53	100	38x24	3- 6x4- 6	2.88	35	7.61	128
22x28	2- 2x5- 2	1.62	23	5.70	102	38x26	3- 6x4-10	3.15	37	8.02	132
22x30	2- 2x5- 6	1.74	24	5.90	104	38x28	3- 6x5- 2	3.50	38	8.44	134
24x16	2- 4x3- 2	1.12	16	4.58	88	40x28	3- 8x5- 2	3.51	39	8.53	136
24x18	2- 4x3- 6	1.27	18	4.79	92	40x30	3- 8x5- 6	3.53	42	8.66	142
24x20	2- 4x3-10	1.32	19	4,97	94	44x28	4- 0x5- 2	4.60	43	9.86	144
24x22	2- 4x4- 2	1.45	21	5.13	98	44x30	4- 0x5- 6	5.40	45	10.76	148

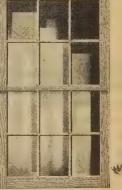
CHECK RAIL WINDOWS 12-LIGHT 4, 8, AND



Size	Size of Opening	274 H 522	Ship.
of	Width Height	Clear	Wt. Pounds
Glass	Ft. In. Ft. In.	Glass	
10x20	2- 1 by 3-10	\$1.33	18
10x24	2— 1 by 4 — 6	1.40	20
10x26	2— 1 by 4—10	1.56	20
10x28	2— 1 by 5— 2	1.57	22
12x20	2 5 by 310	1.32	20
12x22	2- 5 by 4- 2	1.48	20
12x24	2 5 by 4 6	1.49	22 .
12x26	2 5 by 410	1.58	22
12x28	2— 5 by 5 ~ 2	1.64	24
12x30	2 5 by 5 6	1.94	24
14x20	2— 9 by 3—10	1.57	22
14x22	2 9 by 4 2	1.70	24
14×24	2 9 by 4 6	1.71	24
14x26	2 — 9 by 4—10	1.78	26
14x28	2- 9 by 5- 2	1.98	26
14x30	2— 9 by 5— .6	2.14	28
14x32	2 9 by 510	2.27	30
15×24	2—11 by 4— 6	1.86	26







274 H 526

Prices include top and bottom sash glazed with good quality clear glass held with zinc points and putty. 274 H 524—8-Light Check Bail Window

214 H 324—8-Light Check Hall William					
Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	Price Each	Ship. Wt. Pounds		
9x12 10x12 10x14 12x14 12x16	1—11 by 4— 6 2— 1 by 4— 6 2— 1 by 5— 2 2— 5 by 5— 2 2— 5 by 5—10	\$1.32 1.33 1.50 1.60 1.92	16 16 20 20 20 24		

	214 H 320—12-Light Check Hall Willdow			
۱	Size	Size of Opening	Price	Ship.
	of	Width Height	Each	Wt.
	Glass	Ft. In. Ft. In.		Pound
	8x10	2— 4½ by 3—10	\$1.36	18
	8x12	2— 4½ by 4— 6	1.52	20 22
	9x12 9x14	2- 7½ by 4- 6	1.62 1.82	24
	10-12	2 1017 1 4	. 4.60	. 22

Good Quality—Low Prices Complete Stock—Prompt Shipment

Here are a few reasons why Wards' Windows have so many fine qualities and give such satisfactory service. For materials ... only the finest grade Western White Pine go into their construction ... each one is carefully machined ... sanded ... and expertly put together. We have been told by many of our enthusiastic customers of their fine quality and dependability.

All Windows listed on this page are shipped from Chicago, Eastern Iowa or Philadelphia. For Estimated Freight Charges on all windows, see page 3.

IMPORTANT—Special size windows can be furnished if required, but it will take a few days to make them up. Write us for prices. State size, giving width first.

Any size two light window can be furnished with Florentine glass for 30c extra; per light.

at the Savings Wards' mill-to-you prices offer

All at One Low Price

WARDS Pilgrim and Plymouth windows are new and smart. That's why they have become increasingly popular with our customers for new and remodeling work.

And you can buy them in complete sets, too. Sets include windows with frames, trim and hardware exactly as described on Page 70-a complete window at one low price. There's no fuss—no muss, because each piece is cut on precision machinery to fit perfectly.

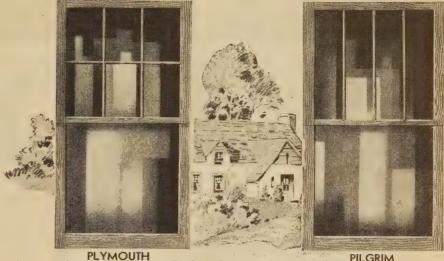
Made of clear Western White Pine full 1% inches thick, strongly mortised and tenoned and glazed with

clear glass. Check rail design (see Page 70).

The number of lights or divisions in upper sash depends upon width of glass in bottom sash. Top sash of Pilgrim and Plymouth windows divided as follows: Bottom Glass 12 to 14 in.wide-Top sash 2 Its. wide Bottom Glass 16 to 22 in.wide - Top sash 3 Its.wide Bottom Glass 24 to 28 in.wide—Top sash 4 lts.wide Bottom Glass 30 to 44 in.wide—Top sash 5 lts.wide.

Average shipping weights on windows only, 13 to 45 lbs.; on complete sets, 82 to 148 lbs.

State width first. All windows shipped from hicago, Eastern Iowa or Philadelphia. For Estimated Freight Charges on all windows, see Page 3.



PILGRIM

Wards Offer these Attractive Windows in Complete Sets—For Your Convenience

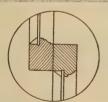
_		TELEST	DOME														
Size	Size of		DOWS	COMPLE	TE SETS	Size	Size of		DOWS LY	COMPLE	TE SETS	Size	Size of		DOWS	COMPLE	TE CETC
of Bot-	Opening	Dilarim	Dlymouth	Pilgrim	Plymouth	of Bot-	Opening	_				of "	Opening		LY.	COMITEE	IE SEIS
tom	Width Height	274 H 538	274 H 519	274 H 1222	274 H 1220	tom	Width Height	Pilgrim	Plymouth	Pilgrim	Plymouth	Bot-		Pilgrim	Plymouth	Pilgrim	Plymouth
Glass	Ft. In. Ft. In.	Clear Glass	Clear Glass	Complete	Complete	Glass		1 2/4 11 330	274 H 519 Clear Glass	274 H 1222	274 H 1220	tom	Et lo Et lo	274 H 538	274 H 519	274 H 1222	Plymouth 274 H 1220
12x20											Complete	Chass	16 10.[16.10.	Clear Glass	Clear Class	Complete	Complete
	1- 4 x 3-10 1- 6 x 3-10	\$1.12 1.18	\$1.22	\$4.37 4.46	\$4.47 4.56	20x28	2- 0 x 5- 2	\$1.74	\$1.88	\$5.72	\$5.86		2-8 x 4-10		\$2.30	\$6,40	\$6.59
	$1 - 6 \times 4 - 6$		1.40	4.79	4.50		$2 - 0 \times 5 - 6$	1.88	2.03	5.92	6.07	28x28	$2 - 8 \times 5 - 2$	2.53	2.73	6.88	7.08
	1- 6 x 4-10	1.34	1.44	5.02	5.12		2- 2 x 4- 6	1.70	1.85	5.48	5.63	28x30	2-8 x 5-6	2.58	2.78	7.00	7.20
	1- 6 x 5- 2	1.50	1.59	5.25	5.34	22x26	2- 2 x 4-10		1.92	5.78	5.93		2- 8 x 5-10		3.25	7.74	7.93
						22x28	2- 2 x 5- 2	1.87	2.02	5.95	6.10		2-10 x 4- 6		2,40	6.40	6.64
	1-8 x 3-10 1-8 x 5-2	1.35	1.49	4.67 4.98	4.81 5.13		2-2 x 5-6	1.99	2.14	6.15	6.30		$2-10 \times 4-10$	2.68	2.92	7.01	7.25
	1- 8 x 4-10	1.61	1.75	5.32	5.46		2-4 x 3-2	1.46	1.65	4.92	5.11	30x28	$2-10 \times 5-2$	2.70	2.94	. 7.14	7.38
	1- 8 x 5- 2	1.67	1.81	5.45	5.59	24x18	2- 4 x 3- 6		1.80	5.13	5.32		$2-10 \times 5-6$		3.25	7.30	7.79
16x30	1-8 x 5- 6	1.73	1.87	5.61	5.75	24x20	$2 - 4 \times 3 - 10$		1.85	5.30	5.50		$2-10 \times 5-10$		3.47	7.99	8.23
-	1-10 x 3-10	1.41	1	4.85			2- 4 x 4- 2	1.78	1.98	5.46	. 5.66		$3 - 0 \times 4 - 6$		3.05	7.15	7.39
	1-10 x 3-10 1-10 x 4- 2	1.56	1.55	4.85 5.06	4.99 5.20	24x24	2- 4 × 4- 6		2.03	5.65	5.85		3-0 x 5-2	3.16	3.40	7.74	7.98
	1-10 x 4- 6	1.60	1.75	5.17	5.32		2- 4 x 4-10		2.06	5.91	6.11		3-0 x 5-6		3.47	7.92	8.16
	1-10 x 4-10		1.82	5.47	5.61		2- 4 x 5- 2 2- 4 x 5- 6	1 95 2.07	2.15	6.15	6.35		3- 6 x 3-10		3.53	7.90	8.13
	1-10 x 5- 2	1.74	1.88	5.60	5.74				2.27	6.37	6.57		3-6 x 4-6		3.54	8.05	8.27
	1-10 x 5- 6	1.85	1.99	5.77	5.91		$2 - 6 \times 2 - 10$		1.70	4.89	5.13		3- 6 x 4-10		.3.80	- 8.44	8.67
	$2 - 0 \times 3 - 10$	1.46	1.61	4.94	5.09	26x24	2- 6 x 4- 6 2- 6 x 4-10	1.88 1.95	2.08	5.87	6.07		3-6 x 5-2	3.93	4.17	8.87	9.11
	2- 0 x 3-10 2- 0 x 4- 2	1.60	1.75	5.14	5.29	26x28	$\frac{2}{2}$ 6 x 5 - 2	2.11	2.15 2.30	6.08	6.28	40x28	3-8 x 5-2	3.95	4.19	8.97	9.21
	2- 0 x 4- 6	1.61	1.76	5.26	5.41	26x30	2- 6 x 5- 6	2.59	2.78	6.93	6.58 7.12		3-8 x 5 - 6		4.23	9.10	9.34
20x26	$2 - 0 \times 4 - 10$	1.68	1.82	5.55	5.69		$\frac{2-8 \times 3-6}{2-8 \times 4-6}$		2.20				4-0x5-2	5.01	5.25	10.27	10.51
		2.00	2.02	0.00	0.07	LUXZE	2- 0 A 4 - U	2.00	2.20	6.15	6.35	44x30	4- 0 x 5- 6	5.72	5.98	11.08	11.34

PLAIN RAIL WINDOWS









Plain rail Windows have no projection where the upper and lower sash meet. The upper sash must be made stationary in the frame. The lower then slides against the upper when raised or lowered. No sash weights required, Use Spring Bolts listed in our General Catalog. Always state width first,



274 H 547

Eight-Light Windows 11/8-Inch Thick

Size of	Size of Opening Width Height Ft. In. Ft. In.	274 H 546	Shipping
Glass		Clear Glass	Weight
8x10 inches	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	98c	14 pounds
9x12 inches		\$1.12	16 pounds
10x12 inches		1.18	18 pounds

Twelve-Light Windows 11/8-Inch Thick

Size of	Size of Opening . Width Height Ft. In. Ft. In.	274 H 547	Shipping
Glass		Clear Glass	Weight
8x10 inches	2- 4 x 3-10	\$1.22	16 pounds
9x12 inches	2- 7 x 4- 6	1.45	20 pounds
10x12 inches	2-10 x 4- 6	1.51	22 pounds

Shipped Promptly from Chicago, Eastern Iowa or Philadelphia. See Page 3 for Estimated Freight Charges.

ATTRACTIVE COTTAGE WINDOWS

A cottage window decidedly attractive in appearance—one that will harmonize well with any style home. Large windows are not only attractive but provide the maximum amount of light, especially where only one window can be used.

These Windows are made of clear Western White Pine 1% inches thick. Carefully glazed with clear glass. Shipping weights 47, 50, 60 and 65 pounds.

Cottage Windows require the same type of frame as any other window. See Pages 76 and 77 for complete line of window frames. Order frame with same opening size as listed below for window.

Shipped Promptly from Chicago, Eastern Iowa or Philadelphia.

	aospina.		
Size of Opening Width Height Ft. In. Ft. In.	Bottom	Top	Hudson
	Glass	Glass	274 H 540
3-8 x 5-0	40x40	40x14	\$3.45
3-8 x 5-2	40x40	40x16	3.55
4-0 x 5-2	44x40	44x16	4.85
4-0 x 5-6	44x44	44x16	5.15



For Estimated Freight Charges—See Page 3

SASH WEIGHTS

To hang a window, four sash weights are needed, each weighing $\frac{1}{4}$ the entire weight of the window. The 3 to $\frac{7}{2}$ -lb. weights are $\frac{1}{2}$ inches diameter; 8 to 16 lbs., $\frac{1}{5}$ % inches. Made of cast iron. Shipping weights: 3, $\frac{3}{2}$, 4, $\frac{4}{2}$, 5, $\frac{5}{2}$, 6, $\frac{6}{2}$, 7, $\frac{7}{2}$, 8, $\frac{8}{2}$, 9, 10, 11, 12, 14 and 16 pounds. 274 H 950 Per pound.....

Buy on Easy Payments—See Page 4

SASH FOR EVERY PURPOSE and all at a SAVING

Why Not Compare Our Low Prices and Actually See for Yourself!

White Pine BARN a n d DAIRY



274 H 550

You can always judge the quality of Barn and Dairy Sash by its construction. Ward's rank with the best because all are finest grade Clear Western White Pine, smoothly sanded, ready to paint. Strong and rigid because all members are mortised and tenon joined and pinned. Glazed with good quality clear glass, held securely with good linseed oil putty. All sash 1% in. thick, except 274H552 which is 11/8 in. thick.



Article Number	Number of Lights	Size Glass In.	Size Opening Width Height Ft., In. Ft., In.	Ship. Wt. Lbs.	Each
274 H 550 274 H 551 274 H 553	9 6 6	9x12 9x12 8x14	2— 7 by 3— 5 2— 7 by 2— 5 1— 8¼ by 3—11½	18 12 13	\$1.21 89c 94c
274 H 552 274 H 552 274 H 552 274 H 552	4 4 4	8x10 9x12 10x12 12x14	1—8 by 2—1 1—10 by 2—5 2—0 by 2—5 2—4 by 2—9	10 12 13	94c 52c 59c 62c 80c

Shipped Promptly Not Prepaid from Mills in Chicago, Ill. Eastern Iowa or Philadelphia, Pa. For Estimated Freight Charges See Page 3.



274 H 553

Once a user of Ward's Barn and Dairy Sash—always a user! For here's the best grade obtainable— the most service you can buy at the

lowest cost.

Our sash are shipped direct to you from the mill—all the usual in-between profits are eliminated. Just another economy that puts money in your pockets when you buy by mail.



Western White Pine

Each sash carefully smoothed and sanded —ready for painting. Glazed with good quality clear glass.

1%-inches thick, with 2 inch rails.

Size of Sash	274 H 515	Shipping
Width Height Ft. In. Ft. In.	Glazed With Clear Glass	Weight
2—6 by 1—0	49c	5 pounds
2-8 by 10	51c	6 pounds
3—0 by 1—4	66c	8 pounds

Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.





Above are two actual pho-Above are two actual photographs of tomato plants raised from the same variety seed planted at the same time. The large one at the left was grown under Vigoray Glass and the other under ordinary class.



VIGORAY Glass

Grows Plants Faster by Transmitting the Ultra-Violet Rays of the Sun

Hot beds with VIGORAY Glass Sash grow plants almost four times faster than ordinary hot beds. Standard tests show that VIGORAY Glass transmits a large part of the vital Ultra-Violet rays that provide the Vitamin D so important to growth. See illustration below at left.

VIGORAY Glass gives you all the advantages of the old-fashioned hotbed, plus much stronger, healthier plants. Try these and convince yourself of the value of VIGORAY Glass! 274 H 545—White pine frame, 1% in thick. Size 3 ft. by 6 ft. Ship. wt. each 45 lbs. In lots of five or more, Each. \$3.95 Lots of less than five. Each... 4.15

Sash With Clear Glass

Protects plants from frost and main-

tains steady growth.

274 H 548—White pine frame 1% inches thick, Sizes 3 ft. by 6 ft. Ship. wt. each 45 pounds.

Lots of five or more. Each. 2.25

Lots of less than five. Each. 2.45

All sash shipped Not Prepaid from mills in Chicago, Eastern Iowa or Philadelphia.



Dress Up Your Windows and You Dress Up Your Home!

In scarcely any other way can so few dollars add so much permanent beauty! Ward's Colonial shutters are made of fine Clear Western White Pine and will last for many years. They are full 1½ inches thick. Furnished smoothly sanded ready to peint. Give us the opening size of your window frame—width first. Shutters are made 1-inch longer than standard frame sizes so they can be cut to fit perfectly. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

Glass Outside Ship. 274 H 534 Each			
Inches		Ship.	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		15	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		16	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		17	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2- 2x5- 3	18	5.75
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2- 4x3-11	14	5.15
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2- 4×4- 7	16	5.20
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2- 4x4-11		3,50
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2- 4x5- 3	10	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2- 4×5-11	26	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		15	5.25
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2- 6x4- 7	17	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2- 6x4-11	18	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2- 0x5- 3	19	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2- 0x3- 1	10	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		19	5.65
30x26 2-10x4-11 21 5.75 30x28 2-10x5-3 22 6.15 30x30 2-10x5-7 23 7.10 38x26 3-6x4-11 24 7.30	2- 8x5- 3	21	
30x30 2-10x5- 7 23 7.10 38x26 3-6x4-11 24 7.30		20	5.40
30x30 2-10x5- 7 23 7.10 38x26 3-6x4-11 24 7.30		21	
38x26 3- 6x4-11 24 7.30		23	
		24	7.30
		25	7,70

Western White Pine-13/8 Inches Thick

Smoothly sanded sash—glazed with good quality clear glass

ready	to paint.		_
Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	513 Glazed Clear Glass	Ship. Wt. Lbs.
16x20	1-8 by 2-1	55c	8
20x20	2-0 by 2-1	63c	
20x24	2-0 by 2-5	69c	10
24x16	2-4 by 1-9	64c	8
24×20	2—4 by 2— 1	69c	10
24x24		77c	12
24x28	2-4 by 2-9	87c	14



Made of clear Western White Pine 1¾ inches thick, with 3-inch bottom rail. Outside measurement of both designs 3 feet 4 inches by 1 foot 11 inches. Glazed with clear glass.

Plymouth Style

274 H 507— Shipping weight 13 pounds. \$1.55

Pilgrim Style

274 H 509—Shipping weight 13 pounds. \$1.45

Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia, Pa.



2 and 3-light CELLAR SASH



Clear Western White Pine-13/8-In. Thick

of	Width Height Ft. In. Ft. In.	Single	Shipping
Glass		Strength	Weight
8x10	2— 4 by 1—3	50c	10 pounds
10x12	2—10 by 1—5	58c	14 pounds
10x14	2—10 by 1—7	63c	14 pounds
10x16	2—10 by 1—9	69c	15 pounds
	274 H 516-2 ligh	t cellar sash	

	274 H 516—2 ligh	it cellar sash	
10x12	2 1 by 15	51c	11 pounds
12x14	2— 5 by 1—7	59c	12 pounds
12x16	2— 5 by 1—9	62c	12 pounds
14x16	2— 9 by 1—9	68c	15 pounds

Shipped Not Prepaid from mills in Chicago, Eastern Iowa or Philadelphia, Pa.

WINDOW GLASS

SINGLE AND DOUBLE STRENGTH

Safe and Prompt Shipment Guaranteed

The Standards of Quality set by Ward's are very exacting. Only a manufacturer with long experience and expert facilities can measure up to them. We have selected some of the largest glass makers in America to make our glass. Our quality must be the best. That's why you can depend on Ward's glass to be always clear and flawless.

Compare our low prices. See how much you save.

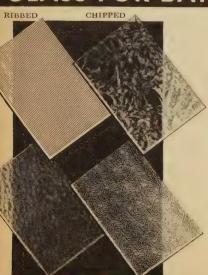
Safe Delivery Guaranteed. Even though skilled glass packers pack each shipment, it is always advisable to shake the box slightly when you get it at your freight office. If there is any sound to indicate that it has been broken in transit, open it in the presence of the station agent and note on the freight bill the number of lights broken. Be sure to mark the breakage on the freight bill. We will then refund your money for any breakage or replace the glass.

When ordering size not listed use the price of the next largest size, and be sure to specify width wanted. On orders for glass amounting to less than \$2.00, add 50c extra for boxing. The terms S.S. and D.S. mean single strength and double strength glass. Single strength glass runs in thickness from 12 to 15 lights to an inch, and the average weight per box is 70 pounds; double strength from 8 to 10 lights to an inch, and the average weight per box is 75 pounds. Shipped Promptly Not Prepaid from Chicago, Eastern Iowa or Philadelphia, Pa. See Page 3 for Estimated Freight Charges.



Size			Number	Size	PER I Article	IGHT Number	No. of	PER Article I	BOX Number	Size	PER I Article	IGHT Number	No. of		BOX Number		
of Each Glass	274 H 574 S.S. Per Light	D.S.	Lights in Box	274 H 576 S.S. Per Box	274 H 577 D.S. Per Box	of Each Glass	274 H 574 S.S.	274 H 575 D.S. Per Light	Lights in Box	274 H 576 S.S. Per Box	274 H 577 D.S. Per Box	of Each Glass	S.S.	274 H 575 D.S. Per Light		274 H 576 S.S. Per Box	274 H 577 D.S. Per Box
		- Digito			T CI DOX		T CT EIGHT	TOT LIGHT		T Cr DOX	T CI DOA	<u> </u>	Fer Light	Fer Light		Per Box	Fer Box
8x10	5c	7c	90	\$3.35	\$4.60	14x26	23c	34c	20	\$3.60	\$5.35	22x28	43c	64c	12	\$3.95	\$ 5.60
8x12	6c	9c	75	3.35	4.60	14x28	28c	42c	18	3.95	5.60	22x32	52c	77c	10	4.00	5.95
8x14	7c	9c	64	3.35	4.60	14x32	32c	48c	16	3.95	5.60	24x24	43c	63c	12	3.95	5.60
9x12	7c	9c	67	3.35	4.60	14x34	33c	52c	15	3.95	5.60	24x26	44c	65c	12	3.95	5.60
9x14	8c	10c	57	3.35	4.60	14x36	36c	55c	14	3.95	5.60	24x28	47c	69c	11	4.00	5.95
10x12	7c	10c	60	3.35	4.60	14x40	40c	59c	13	4.00	5.95	24x30	52c	77c	10	4.00	5.95
10x14	9c	12c	51	3.35	4.60	16x20	19c	30c	23	3.60	5.35	24x36	66c	98c	8	4.10	6.05
10x16	10c	15c	45	3.50	4.95	16x24	24c	35c	19	3.60	5.35	24x40	71c	\$1.03	8	4.40	6.40
10x18	11c	16c	40	3.50	4.95	16x28	32c	48c	16	3.95	5.60	26x26	47c	70c	11	4.00	5.95
10x20 10x24	12c 14c	18c 22c	36	3.50	4.95	16x32	36c	55c	14	3.95	5.60	26x28	53c	73c	10	4.10	6.05
10x24 10x28	14c	26c	30 26	3.50 3.60	4.95	16x34	39c	59c	13	3.95	5.60	26x30	60c	87c	9	4.10	6.05
10x28	19c	26c	24	3.60	5.35 5.35	16x36 16x44	41c 55c	59c 77c	13	4.00	5.95	26x34	71c	\$1.02	8	4.40	6.40
10x30	22c	33c	23	3.95	5.60	18x20	23c	34c	10 20	4.10 3.60	6.05	26x36	73c	1.04	8	4.40	6.40
12x14	11c	15c	43	3.50	4.95	18x22	26c	42c	18	3.95	5.35 5.60	28x28 28x32	59c	87c	9	4.10	6.05
12x16	12c	18c	38	3.50	4.95	18x24	30c	46c	17	3.95	5.60	28x38	71c 83c	\$1.03 1.18	8	4.40	6.40
12x18	14c	20c	33	3.50	4.95	18x28	36c	55c	14	3.95	5.60	30x30	71c	1.03	8	4.40 4.40	6.40
12x20	15c	22c	30	3.50	4.95	18x32	39c	61c	13	3.95	5.60	30x32	73c	1.31	0	4.40	6.40 8.25
12x24	19c	27c	25	3,60	5.35	18x36	47c	70c	îĭ	4.00	5.95	30x38	94c	1.72	6	4.40	8.25
12x26	21c	30c	23	3.60	5.35	20x20	26c	40c	18	3.95	5.60	30x40	95c	1.73	6	4.40	8.25
12x28	22c	32c	21	3.60	5.35	20x22	32c	48c	16	3.95	5.60	32x34	83c	1.48	7	4.40	8.25
12x30	26c	38c	20	3.95	5.60	20x24	33c	50c	15	3.95	5.60	32x42	\$1.54	2.23	5	7.40	8.95
12x32	27c	40c	19	3.95	5.60	20x26	38c	55c	14	3.95	5.60	40x40		2.24	Š		8.95
12x34	30c	42c	18	3.95	5.60	20x28	34c	57c	13	3.95	5.60	40x44		2.88	4		9.10
12x36	31c	45c	17	3.95	5.60	20x34	47c	70c	11	4.00	5.95	42x48		3.30	4		10.50
14x16	14c	20c	32	3.50	4.95 .	20x36	53c	77c	10	4.10	6.05	44x46		3.35	4		10.50
14x18	14c	23c	29	3.50	4.95	22x24	36c	55c	14	3.95	5.60	46x48		4.50	3		10.70
14x20	16c	25c	26	3.50	4.95	22x26	34c	59c	13	3.95	5.60						
14x24	22c	32c	21	3.60	5.35				1			1					

GLASS FOR BATHROOM WINDOWS



Many Attractive Patterns at Unusually Low Prices

Beautiful semi-transparent glass, suitable for office doors, transom windows, church windows, bathroom windows, etc. Furnished in widths of 30 inches or less and lengths up to 6 feet. State width first when ordering. On order for less than \$2.00, add 50c for boxing. Average ship. wt. per sq. ft. 2 lbs. Shipped Not Prepaid from Chicago, Philadelphia or Eastern lows.

rhiladelphia of Lastern Iowa.
Maze Glass 274 H 581—Double Strength. Per square foot 39c
Ribbed Glass 274 H 582—¼-inch. Per square foot 31c 274 H 583—½-inch. Per square foot 46c 274 H 584—Ribbed Wire Glass, ¼-inch. Per sq. ft. 53c
Chipped Glass 274 H 578—Double Strength. Per square foot 49c
Ground Glass 274 H 579—Double Strength. Per square foot41c
Cathedral Glass 274 H 585—Wine. Per square foot

Leaded Crystal Glass

First Quality Materials at New Low Prices

There is a very pleasing decorative feature in these attractive but simple patterns. The designs harmonize well with any style of interior decoration. The joints are neatly made and well soldered. Bars are of lead but you can have coppered bars, at an additional cost of 30 cents per square foot. The minimum charge for leaded crystal in sizes less than 3 square feet is equal to the cost of a piece containing 3 square feet.

When ordering give width of glass opening first and height last. Leaded glass made special. Allow 8 to 10 days for manufacturing. Ship. wt. per square foot, 3 lbs. Shipped Not Prepaid from Chicago, Philadelphia or Eastern Iowa.

274 H 595—Per square 60c 274 H 596—Per square 60c





DOOR FRAMES smoothly sanded western white pine...long-lasting...ready for painting...why pay more?

WHEN you build ... build for permanence. You can do it economically if you select Ward's clear Western White Pine Door Frames—they resist the ravages of time and weather. Sanded to a smooth finish they provide a perfect base for the additional protection of

Naturally you want Door Frames that are made right! The frames you select from Ward's are carefully cut from perfect patterns by skilled workmen. They must fit!

HEAD JAMP

SIDE CASING

HEAD CASING

SIDE CASING



THERE is two-fold economy in buying at Ward's. First, because of the lasting qualities of the Western White Pine and the careful way in which our Frames are made insure long, dependable service. Second. because Ward's sell to you by mail at money-saving prices and ship to you direct-from-the-mill with all in-between profits eliminated.

IMPORTANT-If you want a smaller size than is listed, you can easily cut down an outside frame to the desired size. If you prefer to have it done at the mill, jambs will be cut to a smaller width at an extra charge of 50c each. Frames are rabbeted for 13/8 in. doors. If desired Frames will be rabbeted for 13/4 in. doors, at no extra charge.

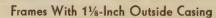
PLAIN CAP DOOR FRAMES

Frames With 11/8-Inch Outside Casing

Trames With 1½-Inch Outside Casing
These frames are for standard 2 by 4 studding construction using
sheathing and plaster. Jambs are 1½ by 5½ inches, rabbeted ½
by 1½ inches. Sill is 1½ by 7½ inches. Outside casing is 1½ by 4½
inches. Drip cap is 1½ by 1½ inches. Sizes listed are carried in
stock. Shipped knocked down. For intermediate sizes order next
larger size, and cut down. Prices of frames do not include inside
trim. Furnished with oak sills at 75c extra. Average ship. wt. each
45 lbs. Shipped promptly Not Prepaid from Chicago, Eastern
Iowa or Philadelphia.

274 H 609—State Size Wanted	_
Size of door—2 ft. 6 in. by 6 ft. 6 in	5
Size of door—2 ft, 8 m. by 6 ft. 8 m. 3.	80
Size of door—3 ft. by 6 ft. 8 in	17
Size of door—3 ft. by 7 ft	26
If plain cap frames with 3/4 inch outside casings are wanted	d.
deduct 300 from the price of desired size listed shows and and	

CROWN MOULD CAP DOOR FRAMES



These frames are for standard 2 by 4 studding wall construction, using sheathing and plaster. Jambs are 13% by 51%, rabbeted 1½ by 13% inches. Drip cap is 1½ by 25% inches. Crown moulding is 3½ by 2 inches. Head casing is 1½ by 53% inches.

All frames are shipped knocked down. Sizes listed are carried in stock. For smaller sizes or intermediate sizes order next larger size and cut down to desired size.

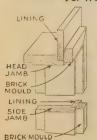
Trices of frames do not include inside trim. See page 75 for trim rices. Average ship, wt. each, 50 lbs. Shipped Not Prepaid from hicago, Eastern lowa or Philadelphia.

and a second sec	
274 H 611—State Size Wanted	2 20
Size of door—2 ft. 6 in. by 6 ft. 6 in.	3.20
Size of door -2 ft. 8 in. by 6 ft. 8 in.	
Size of door—3 ft. by 6 ft. 8 in.	3.42
Size of door—3 ft. by 7 ft	3.51
See page 3 for Estimated Freight Charges.	

For 51/4 inch stucco walls, order frame 274 H 609 listed above, and specify with beveled casings. Add 30c to the price quoted. For 6 inch stucco walls, order frame 274 H 621 and specify with 6 inch jambs. Add 50c to price listed for 274 H 609.

BRICK VENEER DOOR FRAMES

For Walls 51/4-Inches Thick



Ills 5½-Inches Thick

These frames are made for walls with
2 by 4 studding and allow for a ¾ in.
air space between sheathing and
brick. Lining ¾ by 4½ in.; jambs
1¾ by 6 in. Brick moulding 1½ by
2 in. No sills included. Side jambs
1½ in. longer than opening to allow
for setting in concrete, or trimming
to fit sloping sill or floor.

Sizes listed carried in stock. For
smaller or intermediate sizes order
next larger size and cut down to fit.
Frames are rabbeted for 1¾ inch
doors. Frames will be rabbeted for
1¾ inch doors at no extra charge.
Shipped knocked down. Specify
size rabbet wanted. Average shipping weight each 46 pounds. Shipped
Not Prepaid from Chicago, Easthia.

Wanted

ern Iowa or Philadelphia.	
274 H 612-State Size Wanted	PO FO
274 H 612—State Size Wanted Size of door 2 ft. 6 in. by 6 ft. 6 in	32.5U
Size of door 2 ft. 8 in. by 6 ft. 8 in	2.58
Size of door 3 ft. by 6 ft. 8 in	
Size of door 3 ft. by 7 ft	2.75

PLANK DOOR FRAMES

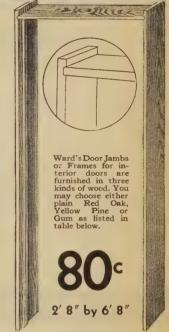
Jambs 1% in. thick. Brick mould For Walls 9 In. Thick 1½ by 2 in. with beaded edge. Frames 65% in. wide overall. Rabbeted ½ by 1¾ in. unless otherwise specified. Furnished with side jambs 1½ in. longer than opening to allow for setting in concrete, or for trimming to fit sloping sill or floor. No arch boards or spring pieces included, but can be furnished for 25c each extra per frame. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia, Pa. Ship. wt. 45 lbs.

ern lowa or Philadelph wt. 45 lbs. 274 H 606—State Size. Size of door 2-6 by 6-6. Size of door 2-8 by 6-8. Size of door 3-0 by 6-8. Size of door 3-0 by 7-0. 2.35

SIDE JAMB

BRICK MOULDING

FRAMES or JAMBS FOR INSIDE USE



Jambs are ¾ inches thick by 5¾ inches wide with side jambs dadoed for head. Prices quoted below do not include stops. For stops see Page 78.

below do not include stops. For stops see Page 78.

These jambs are shipped knocked down but are all ready to set up. They are accurately cut so they fit perfectly—you can set them up quickly and easily. We quote four standard sizes which we carry in stock and ship promptly the day your order is received. If the size you require is not listed, order next larger size and cut down to the required size. If you desire we will cut down the width of jambs at the mill for 35c per set extra. Stops not included.

Average shipping weight each, 20 lbs. Shipped

Average shipping weight each, 20 lbs. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia, Pa.

State size wanted when ordering

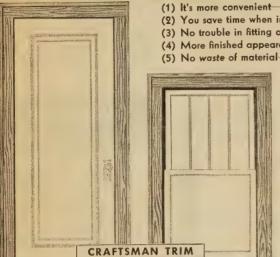
274 H 601—Yellow Pine	
Size of door 2 ft. 8 in. by 6 ft. 8 in 80c	
Size of door 3 ft. by 7 ft	
Size of door 6 ft. by 7 ft\$1.00	
Size of door 10 ft. by 8 ft 1.30	į
274 H 600—Gum	
Size of door 2 ft. 8 in. by 6 ft. 8 in \$1.05	
Size of door 2 ft. 8 m. by o ft. 8 m.,	

Size of door 6 ft. by 7 ft... Size of door 10 ft. by 8 ft...

974 H 603—Plain Red Oak Size of door 2 ft. 8 in. by 6 ft. 8 in. Size of door 3 ft. by 7 ft... Size of door 6 ft. by 7 ft... Size of door 10 ft. by 8 ft...

BUY DOOR AND WINDOW TRIM COMPLETE

It's more convenient you save time and money



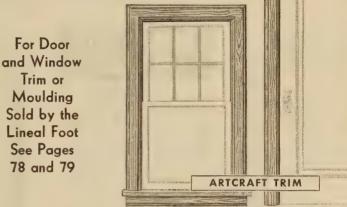
(1) It's more convenient—saves all the complicated measuring and figuring.

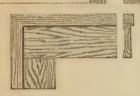
(2) You save time when installing—and time means money.

(3) No trouble in fitting or matching—simply trim to fit.

(4) More finished appearance—easier to make, neater joints and exact fit.

(5) No waste of material—you'll save money on the job.





Craftsman Door Trim

A neat distinctive design, giving grace and dignity to the doorway. Set consists of Side casing, % by 3 ½ in; Head casing, % by 3 ½ in; and Back band, ¾ by ½ in. Average shipping weight per side 20 pounds. Shipped Not Prepaid from Chicago, Eastern lowa or Philadelphia.

For Door Opening		Price per Side		
Size Up to Width He		274 I	I 646	
Ft. In. Ft. In.		Yellow Pine	Oak	
2-6 by 6-	-6	69c	\$1.71	
2-8 by 6-	-8	69c	1.71	
3-0 by 7-0		74c	1.85	
6-0 by 7-	-0 l	86c	2.14	
8-0 by 8-	-0]	99c	2.50	

Craftsman Window Trim

Set consists of Side casing, size $\frac{5}{4}$ by $\frac{3}{4}$ inches, Head casing, $\frac{5}{4}$ by $\frac{3}{4}$ in., Back band, $\frac{3}{4}$ by $\frac{15}{16}$ in.; Stool $\frac{15}{16}$ in.; Apron, $\frac{3}{4}$ by $\frac{15}{16}$ in.; Stop, $\frac{1}{2}$ by $\frac{1}{2}$ in.; Apron, $\frac{3}{4}$ by $\frac{3}{2}$ in.; Stop, $\frac{1}{2}$ by $\frac{1}{2}$ in. Ship. wt. per side, 20 lbs. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

Any Window Opening	Price per Side		
Size Up To Width Height	274 H 636		
Ft. In. Ft. In.	Yellow Pine	Oak	
2-4 by 4-6	90c	\$2.37	
2- 4 by 5- 2	99c	2.59	
2—10 by 5— 6	99c	2.59	
3— 0 by 5—10	\$1.05	2.79	
3— 8 by 6— 2	1.19	3.13	
4— 0 by 6— 6	1.25	3.29	

Mission Window Trim

(Pictured at Right) →

Set consists of Side casing, size 34 by 414 inches; Head casing, 11/8 by 51/2 in.; Stool, 11/8 by 31/2 in.; Apron, 34 by 31/2 in.; Stop, 36 by 11/3/6 in. Ship, wt. per side 20 lbs. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

my Window Opening	Price pe	r Side
Size Up to Width Height	274 H	635
Ft. In. Ft. In.	Yellow Pine	Oak
2- 4 by 4- 6	99c	\$2.61
2 4 by 5 2	\$1.07	2.81
2-10 by 5-6	1.07	2.81
3- 0 by 5-10	1.11	2.96
3-8 by 6-2	1.30	3.41
.4- 0 by 6- 6	1.34	3.53

Clear Grade Oak, Yellow Pine or Gum Woods Used in Ward's Trim

Every piece of wood is carefully selected for beauty of grain—then it's thoroughly seasoned and kiln-dried—manufactured on high speed machinery—all flat surfaces smoothly sanded. All three woods are ideal for stain and varnish. For enamel, use either Gum or Yellow Pine.

Why Our Prices Are Lower

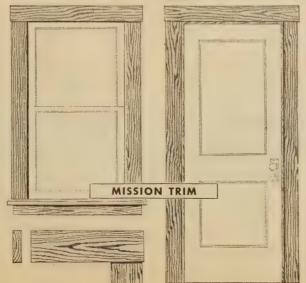
Because all these styles are manufactured in huge quantities, and carried in stock, we can sell you this quality Trim for less than others must usually ask. The quality should not be judged by our low price this trim is all carefully machined on the latest high speed, heavy duty equipment, to assure fine work. All flat surfaces are carefully sanded ready for finishing. Trim parts are furnished about ½ inch longer than required to allow for perfect fitting.

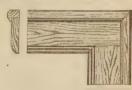
Read Carefully Before Ordering

All Trim is shipped direct from mills—you save extra handling costs. For sizes not listed simply order the next larger size and cut down.

Each outside door needs one side of trim—inside doors need two sides. You need only one side of inside trim for each window. For twin windows, figure double the price of a single set of trim; for triple windows, figure three times the price of a single set. Tell us if you are ordering for twin or triple windows, so we can include mullions. Trim includes all parts specified, carefully bundled.

For Door Stops see page 78. For a complete line of Paints and Varnishes, see Ward's General Catalog. Estimated Freight Charges, Page 3.





Artcraft Door Trim

New—modern—will harmonize with any type of home. Set consists of Side casing, ½ by 3½, inches; Head casing, ½ by 3½, inches; and Backband, ¾ by ½, 6 inches. Average shipping weight per side 20 pounds. Shipped Not Prepaid from Chicago, Eastern lowa or Philadelphia.

For Door Open- ing Size Up to Width Height	Price per Side 274 H 1134			
Ft. In. Ft. In.	Yellow Pine Gum Oak			
2-6 by 6-6	57c	87c	\$1.50	
2—8 by 6—8	57c	87c	1.50	
3-0 by 7-0	61c	95c	1.61	
6—0 by 7—0	70c	\$1.08	1.86	
8-0 by 8-0	85c	1.29	2.23	

Arteraft Window Trim

Set consists of Side Casing ½ by 3¼ inches; Head Casing ½ by 3½ in.; Back Band ¾ by ½ inches; Stool ½ by 3½ in.; Apron ½ by 3½ inches; Stop ¾ by ½ in. Ship. wt. per side 20 lbs. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia

Any Window Open-	Pri	ce per Sid	le
ing Size Up to Width Height	274 H 1136		
Ft. In. Ft. In.	Yellow Pine	Gum	Oak
2-4 by 4-6	77c	\$1.19	\$2.04
2— 4 by 5— 2	84c	1.31	2.24
2—10 by 5— 6 3— 0 by 5—10	84c 91c	1.31	2.24
3— 8 by 6— 2	\$1.01	1.56	2.69
4 0 by 6 6	1.07	1.65	2.84

Mission Door Trim

← (Pictured at left)

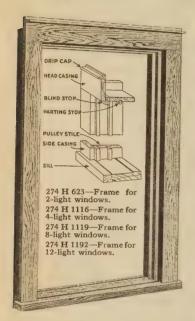
A simple good-looking Trim that lends dignity. A set consists of Side Casing, 34 by 414 inches; Head casing, 11/8 by 51/2 inches, Base blocks, 11/8 by 41/4 by 11 inches. Average shipping weight per side 20 pounds. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

For Door Opening Size Up to	Price per Side Price includes Base Blocks		
Width Height	274 H 645		
Ft. In. Ft. In.	Yellow Pine	Oak	
2—6 by 6—6	74c	\$1.94	
2—8 by 6—8	74c	1.94	
3—0 by 7—0	80c	2.11	
6—0 by 7—0	\$1.00	2.63	
8-0 by 8-0	1.19	3.11	

Name any size, any style WINDOW



The Pulley Stiles have pockets cut in for sash weights and are grooved to receive the sill at an angle so that water will run off.



2x4 studding construction with 51/4 inch walls. Outside casings of frame are 11/8 inches thick and will take Ward's standard 11/8 inch Screens and Storm

Pulley Stiles and Head Jambs are ³/₄ by 5¹/₄ inches and include the Blind Stop. Both pulley stiles and head jamb are plowed and fitted with parting stops. Sill is 1³/₄ by 7¹/₄ inches with groove in bottom for siding. Drip Cap is 1¹/₈ by 1³/₄ inches

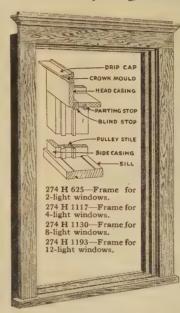
See sketch at left for details of construction and various members of window frame. Shipped Not Prepaid from Chicago, eastern Iowa or Philadelphia, whichever is nearest.

Note: If 3/4-inch outside casings are wanted, deduct 30c from the price of desired size listed under 11/4 inch casing and order frames under number 274 H 622.

All frames pictured on Pages 76 and 77 are furnished for 2, 4, 8 and 12 light windows in sizes indicated.

. . YOU GET QUICK SERVICE

Sixteen different types of Window Frames...as many as sixty sizes of each...frames all packed and ready for shipment the minute your order is received. Ward's gives you the fastest service from the largest and most complete stock carried anywhere. Just think what an advantage that is, when you get such big savings too! Careful workmanship and approved construction assure you the best of quality. Selected clear Western White Pine assures you long, satisfactory service.



MOULDED

Use for frame buildings with 2x4 studding and walls 51/4 inches thick. All specifications are same as Plain Cap Frame at left, except for the Cap construction: the drip cap is larger and has a crown moulding under it. See sketch at left for details of construction. See prices below.

Frames for Cottage Windows

Order the same as if for 2-light frames of same opening size

Frames for 51/4" Stucco Walls

Order Plain Cap Frame listed at left and specify, with beveled casings and add 40c extra per frame (or you can easily bevel this casing yourself when you get it on the job). For 6-inch Stucco Wall construction, order frame 274 H 671, naturation, order frame 274 H 623 Plain Cap Frame.

Specify on your order, "For Stucco Walls."

For Frame Sizes Not Listed

If the style and size you want is not listed here, write our Engineering and Information Department and we will promptly quote you a price.

Prices on PLAIN CAP and MOULDED CAP FRAMES for 2-Light Windows

Size of Glass	Size of Opening Width Height	Plain Cap Frames	Crown Mould Cap Frames	Av. Ship. Wt. Lbs.
	Ft. In. Ft. In.	274 H 623	274 H 625	Lbs.
12x20	1-4 x 3-10	\$1.87	\$2.05	25
14x20 14x24	1-6 x 3-10	1.90	2.15	27
14x24 14x26	1-6 x 4-6 1-6 x 4-10	2.03 2.10	2.24	29
14x28	1-6 x 5-2	2.17	2:30 2:37	31 33
16x20	1-8 x 3-10	1.94	2.15	27
16x24	1-8 x 4-6	2.07	2.28	29
16x26	1-8 x 4-10	2.13	2.34	31
16x28	1 8 x 5 2	2.20	2.41	33
16x30 18x20	1-8 x 5-6	2.26 1.98	2.48	35
18x20 18x22	1—10 x 3—10	1.98	2.21	27
18x22 18x24	1-10 x 4- 2 1-10 x 4- 6	2.04 2.11	2.27 2.34	29
18x26	1-10 x 4-10	2.17	2.34	31 33
18x28	î—i0 x 5— 2	2.24	2.47	35
18x30	1-10 x 5- 6	2.30	2.53	37
20x20	2-0 x 3-10	2.02	2.25	2.5 2.7 2.9
20x22	2-0 x 4-2	2.08	2.31	27
20x24	2-0 x 4-6 2-0 x 4-10	2.15	2.38	29
20x26 20x28	2-0 x 4-10 2-0 x 5-2	2.21 2.28	2.45	31 33
20x20	2-0 x 5-6	2.34	2.45 2.52 2.58	35
22x24	2-0 x 4-6	2.24	2.49	20
22x26	2- 2 x 4-10	2.31	2.55	31
22x28	2- 2 x 5- 2	2,38	2,62	29 31 33
22x30	2- 2 x 5- 6	2.44	2.68	35
24x16	2-4 x 3-2	2.00	2.26	29
24x18 24x20	2— 4 x 3— 6 2— 4 x 3—10	2.06	2.33	31
24x20 24x22	2— 4 x 3—10 2— 4 x 4— 2	2.15	2.42 2.48	33 35
27,55	2 1 1 2	2.22	2.40	

	Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	Plain Cap Frames 274 H 623	Crown Mould Cap Frames 274 H 625	Ship. Wt.
ı	24x24 24x26 24x28	2-4 x 4-6 2-4 x 4-10 2-4 x 5-2	\$2.28 2.35 2.42	\$2.55 2.61 2.68	37 39 41
I	24x30 26x14 26x24	2— 4 x 5— 6 2— 6 x 2—10 2— 6 x 4— 6	2.48 1.88 2.33	2.74 2.15 2.60	43 31 33 35 37 27 29 31 33 35 29 31
ı	26x26 26x28 26x30	2— 6 x 4—10 2— 6 x 5— 2 2— 6 x 5— 6	2.39 2.46 2.52	2.66 2.73 2.79	33 35 37
ı	28x24 28x26 28x28	2— 8 x 4— 6 2— 8 x 4—10 2— 8 x 5— 2	2.40 2.47 2.53	2.68 2.75 2.82 2.88	27 29 31
	28x30 28x32 30x24	2— 8 x 5— 6 2— 8 x 5—10 2—10 x 4— 6	2.60 2.74 2.45	3.02 2.74	33 35 29
ı	30x26 30x28 30x30	2-10 x 4-10 2-10 x 5-2 2-10 x 5-6	2.51 2.58 2.64	2.80 2.87 2.93	31 33 35
i	30x32 32x24 32x28	2—10 x 5—10 3— 0 x 4— 6 3— 0 x 5— 2	2.78 2.49 2.62	3.06 2.79 2.92	35 37 31 33 35
ı	32x30 38x20 38x24	3 - 0 x 5 - 6 3 - 6 x 3 - 10 3 - 6 x 4 - 6	2.69 2.49 2.62	2.97 2.82 2.95	35 31 33
ı	38x26 38x28 40x28	3— 6 x 4—10 3— 6 x 5— 2 3— 8 x 5— 2	2.69 2.76 2.80	3.01 3.08 3.14	31 33 35 37 35
	40x30 44x28	3 - 8 x 5 - 6 4 · 0 x 5 - 2	2.87 2.90 2.96	3.20 3.25 3.32	37 37 30

FRAMES FOR 4-LIGHT WINDOWS

Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	Plain Cap Frame 274 H 1116	Crown Mould Cap Frame 274 H 1117	Box Window Frame 274 H 1131	Brick Veneer Frame 274 H 1196
10x20	2-1 x 3-10	\$2,11	\$2,36	\$2.10	\$2.00
10x22	2-1 x 4-2	2.18	2.41	2.17	2.05
10x24	2-1 x 4-6	2.24	2.49	2.27	2.11
10x26	2-1 x 4-10	2,31	2.55	2.34	2.17
10x28	2— î x 5— 2	2.38	2.62	2.43	2.24
12x20	2-5 x 3-10	2.20	2.47	2.21	2.08
12x22	2-5 x 4-2	2.26	2.53	2.28	2.14
12x24	2-5 x 4-6	2.33	2.60	2.37	2.19
12x26	$\tilde{2} - \tilde{5} \times \hat{4} - 10$	2,39	2.66	2.46	2.25
12x28	2— 5 x 5— 2	2.46	2.73	2.53	2.31
12x30	2-5 x 5 6	2.52	2.79	2.62	2.38
14x20	2- 9 x 3-10	2.32	2.61	2.30	2.15
14x22	2- 9 x 4-2	2.38	2.67	2.31	2.21
14x24	2- 9 x 4- 6	2.45	2.74	2.47	2.28
14x26	2- 9 x 4-10	2.51	2.80	2.56	2.34
14x28	2 9 x 5 2	2.58	2.87	2.63	2.42
14x30	2 9 x 5 6	2.64	2.93	2.73	2.48
14x32	2 9 x 510	2.78	3.06	2.84	2.57
4524	0 11 16	2.40	0.70	2.07	0.22

FRAMES FOR 8-LIGHT WINDOWS

Frames for four and eight light windows are furnished in the four styles shown above Plain Cap, Crown Mould Cap, Box and Brick Veneer. When ordering state size of opening and article number.

Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	Plain Cap Frame 274 H 1119	Crown Mould Cap Frame 274 H 1130	Box Frame 274 H 1132	Brick Veneer Frame 274 H 1197
9x12	1-11 x 4- 6	\$2,15	\$2,38	\$2.24	\$2.01
10x12	2— 1 × 4— 6	2.24	2.48	2.27	2.17
10x14	2— 1 x 5— 2	2.38	2.62	2,43	2.24
12x14	2- 5 x 5- 2	2.46	2.73	2.53	2.31
12×16	2 5 x 510	2.66	2 02	. 274	2 47

Prices of Mullion or Twin Window Frames are two times the price of single frames of the same size, plus 25c.

Prices of Triple Window Frames are three times the price of single frames of the

Prices of Iriple Window Frames are three times the price of single frames of the same size, plus 75c.

Prices of Quadruple Window Frames are four times the price of single frames of the same size, plus \$1.25.

All Frames Shipped Not Prepaid from Mills in Chicago, Eastern Iowa or Philadelphia. For Estimated Freight Charges see Page 3.

FRAME for any type house we have it

. AND YOU SAVE MONEY

QUANTITY production with the latest type of high speed machinery makes it possible for us to produce all our millwork at a very low price. The savings of this low cost production are passed on to you along with the benefits of the precision and accuracy made possible by this modern equipment. Added to Ward's economical production are the further economies of selling by mail and shipping direct from the mill to you.

How to Order Window Frames

The correct and most economical way of buying Window Frames is to first decide what size and type of window you want. Order your Frame by Article Number and state the opening size required for the window in feet and inches. Be sure to state width first. The rough wall opening for the Frame should be approximately 6 inches wider and 5 inches higher than the frame opening size required for the window (Box Frames should be approximately 8 in. wider and 4 in. higher.), to allow space for sashweights and squaring-up.

For Frame Sizes Not Listed, specify size wanted and allow price of next larger size. We will ship you the size specified.

BOX WINDOW FRAMES

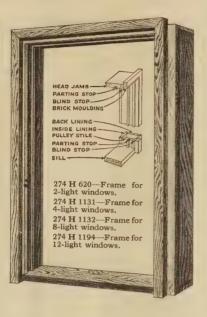
This is the frame to use for Brick, Stone and Concrete buildings. It is for standard 9-inch brick walls but can be used for 13-inch walls because the inside lining is plowed to receive extension jambs.

Brick Mould 11/2x2 inches with beaded edge. Blind Stop 3/2x41/2 inches. Pulley Stile 3/4x51/2 inches, including blind stop and inside lining. Parting Stop 1/2x4/2 inches. Back Box lining, 3/4x3/2 inches. Back Box lining, 3/4x3/2 inches. Blind Stop. Sill 15/2x51/2 inches.

Same fine quality and excellent construction as our Plain Cap and Moulded Cap Frames listed on opposite page.

No arch boards or spring pieces are included, but can be furnished for 15c extra per frame. The arch boards can readily be nailed right on top of the head brick moulding.

See instructions above on "How to Order," Buy on Easy Payments—see Page 4 for details.

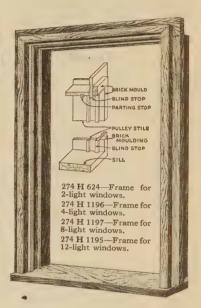


BRICK VENEER FRAMES

Use this Frame for Brick Veneer buildings with walls 5½ inches thick, measuring from outside of sheathing to and including plaster. This is the thickness of the average wall with 2x4 studding.

Brick Moulding $11/8\pi^2$ inches. Blind Stop $3/8\pi^41/2$ inches. Parting Stop $1/2\pi^3/4$ inch. Pulley Stile and Head Jamb $3/8\pi^51/4$ inches. Sill $15/8\pi^71/4$ inches.

To secure lowest possible freight rates, all of Ward's Window Frames shown on Pages 76 and 77 are shipped knocked-down, ready for assembly. All parts are carefully cut and machined so that assembly is easy. Freight Rates are low—see estimated freight charges on Page 3. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia, whichever is nearest to save you time and money.



Prices on BOX WINDOW and BRICK VENEER FRAMES for 2-Light Windows

				_
Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	Box Window Frames 274 H 620	Brick Veneer Window Frames 274 H 624	Average Ship. Wt. Lbs.
12x20 14x20 14x24 14x24 14x26 14x28 16x20 16x24 16x26 16x28	Ft. In. Ft. In. 1-4 x 3-10 1-6 x 3-10 1-6 x 4-6 1-6 x 5-2 1-8 x 3-10 1-8 x 4-6 1-8 x 4-10 1-8 x 4-10	\$1.95 1.98 2.15 2.22 2.31 2.02 2.18 2.26 2.34	274 H 624 \$1.76 1.80 1.92 1.97 2.03 1.85 1.95 2.01	Lbs. 30 32 34 36 38 40 42 44 46
16x30 18x20 18x22 18x24 18x26 18x26 18x28 18x30 20x20	1-8 x 5-2 1-10 x 3-10 1-10 x 4-2 1-10 x 4-6 1-10 x 4-10 1-10 x 5-2 1-10 x 5-6 2-0 x 3-10	2.42 2.03 2.12 2.21 2.28 2.37 2.46 2.05	2.14 1.87 1.93 1.98 2.05 2.11 2.17	48 32 34 36 38 40 42 32
20x22 20x24 20x26 20x28 20x30 22x24 22x26	2— 0 x 4— 2 2— 0 x 4— 6 2— 0 x 5— 2 2— 0 x 5— 6 2— 0 x 4— 6 2— 2 x 4— 10	2.15 2.24 2.31 2.40 2.49 2.26 2.34	1,96 2,02 2,09 2,15 2,21 2,11 2,17	34 36 38 40 42 38 40
22x28 22x30 24x16 24x18 24x20 24x22	2— 2 x 5— 2 2— 2 x 5— 6 2— 4 x 3— 2 2— 4 x 3— 6 2— 4 x 3—10 2— 4 x 4— 2	2.43 2.51 1.94 2.01 2.16 2.25	2.24 2.30 1.87 1.92 2.04 2.09	42 44 40 42 44 46

		9		
Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	Box Window Frames 274 H 620	Brick Veneer Window Frames 274 H 624	Average Ship. Wt. Lbs.
	Ft. In. Ft. In. 2-4 x 4-6 2-4 x x 4-10 2-4 x x 5-2 2-4 x 5-2 2-4 x 5-6 2-6 x 2-10 2-6 x 4-10 2-6 x 5-6 2-8 x 4-10 2-6 x 5-6 2-8 x 4-10 2-8 x 5-6 2-8 x 5-16 2-8 x 5-16 2-10 x 5-6 2-10 x 5-6 2-10 x 5-6 3-0 x 5-10 3-0 x 5-10	274 H 620 \$2.34 2.41 2.58 1.88 2.37 2.46 2.53 2.62 2.40 2.52 2.64 2.76 2.77 2.77 2.73 2.84 2.77 2.73 2.84 2.77 2.77 2.77 2.73 2.84 2.77 2.77	274 H 624 \$2.15 \$2.21 2.28 2.35 1.82 2.19 2.25 2.31 2.38 2.24 2.31 2.31 2.31 2.32 2.43 2.43 2.44 2.44 2.44 2.44 2.44 2.44 2.45 2.45 2.36 2.37 2.45 2.38 2.45 2.41 2.31 2.41 2.51	Lbs. 48 48 50 36 40 42 44 46 40 42 44 46 48 50 42 44 46 48
38x24 38x26 38x28 40x28 40x30 44x28	3— 6 x 3—10 3— 6 x 4— 6 3— 6 x 4—10 3— 6 x 5— 2 3— 8 x 5— 2 3— 8 x 5— 6 4— 0 x 5— 2	2.46 2.62 2.70 2.79 2.82 2.90 2.88	2.31 2.45 2.51 2.57 2.61 2.67 2.73	44 46 48 50 44 46 48 50
44x30	4— 0 x 5— 6	2.97	2.79	50

FRAMES FOR 12-LIGHT WINDOWS

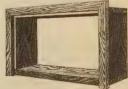
Size of Glass	Size of Opening Width Height Ft. In. Ft. In.	Plain Cap Frame 274 H 1199	Crown Mould Cap Frame 274 H 1193
8x10 8x12 9x12 9x14 10x12 10x14 10x16	2— 4½ x 3—10 2— 4½ x 4—6 2— 7½ x 4—6 2— 7½ x 5—2 2—10½ x 5—2 2—10½ x 5—2 2—10½ x 5—10	\$2.20 2.33 2.40 2.53 2.49 2.62 2.82	\$2.47 2.60 2.69 2.82 2.79 2.92 3.12
Size of Glass	Size of Opening Width Height Ft. In. Ft In.	Box Window Frame 274 H 1194	Brick Veneer Frame 274 H 1195
8x10 8x12	2- 4½ x 3-10	\$2.21	\$2.08

CELLAR SASH FRAMES

Clear Western White Pine Frames for stone, concrete or brick wall construction. Brick mould is $1\frac{1}{8}x^2$ inches. Jamb is $1\frac{3}{8}x^5\frac{1}{4}$ inches rabbeted $\frac{1}{2}x^1\frac{3}{8}$ inches for in-swinging sash. Sill is $1\frac{3}{4}x^5\frac{1}{4}$ inches. Carefully machined ready to paint. Very easy to put together. Average shipping weight each, 20 pounds. Shipped Not Prepaid from Mills in Chicago, Eastern Iowa and Philadelphia. Estimated Freight Charges on Page 3.

Frame for Two-Light Sash

Glass Size, In.	Opening Size Ft. In. Ft. In.	274 H 634 Bach
10x12 12x14	2-1 x 1-5	97c \$1.07
12x16	2-5 x 1-9	1.10
14x16	2-9 x 1-9	1.26



Frame for Three-Light Sash

Glass	Opening Size	274 H 1133
Size, In.	Ft. In. Ft. In.	Each
8x10	2— 4 x 1—3	96c
10x12	2—10 x 1—5	\$1.19
10x14	2—10 x 1—7	1.23
10x16	2—10 x 1—9	1.26

Budget Plan of Easy Payments — Page 4

BASEBOARDS

All prices are per 100 lineal feet in random lengths. For exact lengths add 10 per cent. Order all three members in same wood. Shipped Not Prepaid from Mills in Chicado Esstern Loye or Chicago, Eastern Iowa or Philadelphia.

71/4-Inch Base

274 H 676—Back Band Size 1½ by 1½ inches. Ship. wt. 100 ft. 26 lbs. Yellow Pine ... \$1.40 274 H 708—Base
Size 3/4 by 71/4 inches. Ship.
wt. 100 ft. 120 lbs.
Yellow Pine\$5.50

Gum.... \$1.60 Note: For two-member base use Base 274 H 708 with Carpet Strip 274H-

51/4-Inch Base

Gum.....

274 H 717—Base
Size 5% by 51/4 inches. Ship.
wt. 100 ft. 80 lbs.
Yellow Pine.....\$3.85 Gum... Oak 9.70 Use Carpet Strip 274 H 712 (see above).

3½-Inch Base

274 H 696—Base Size % by 3½ inches. Ship. wt. 100 ft. 60 lbs. Yellow Pine....\$2.55

Use Base Moulding 274 H 716 and Carpet Strip 274 H 712 (see above).

CEILING CORNICE



lengths are desired. 274 H689
274 H672—Ceiling or Side Wall Moulding. 5% by 2½ inches. Ship. wt. 100 lineal feet, 25 pounds.
Yellow Pine, \$1.65. Gum, \$2.45. Oak, \$4.95
274 H673—Cove Moulding or Main Member. 1½ by 5½ inches. Ship. wt. 100 lineal feet, 70 pounds.
Yellow Pine, \$5.40. Gum, \$9.80.
Oak, \$17.80
274 H689—Picture Moulding. ½ by 1½ inches. Ship. wt. 100 ft. 25 lbs.
Yellow Pine, \$1.08. Gum, \$1.80. Oak, \$3.25

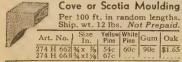
inches. Ship. wt. 100 ft. 25 lbs. Yellow Pine, \$1.08. Gum, \$1.80. Oak, \$3.25



Quarter Round Moulding

Per 100 ft.; random lengths. Add 10% for exact lengths. Ship. wt. 13 lbs. Not Prepaid.

Art. No.	Size In.	Yellow Pine	White Pine	Gum	Oak
274 11 664	54 - 54	540			
274 H 664 274 H 665	34 X 34	54c	60c	90c	\$1.65



WARD'S INTERIOR TRIM and MOULDINGS Give Your Home a "Better Finished" Look

2 x 4 Stud-

Sheathing

Drip Cap-Head Casing

Blind Stop Parting Stop

Pulley

Sosh Cord

Pulley Stile_

Inside Casina

Back Band

Check Roll

Window Stock

Viciolana America

All our mouldings are made from first quality, thoroughly kiln-dried, clear lumber carefully selected for beauty of grain and freedom from knots and defects. All flat surfaces are machine sanded to perfect smoothness.

Such first quality mouldings would usually cost you much more. You save at Ward's because we handle large quantities and ship direct from the mill to you-eliminating inbetween profits and extra handling charges.

Oak mouldings come in random lengths varying from 6 to 12 feet; other woods in random lengths from 10 to 16 feet. If exact lengths are desired, add 10 per cent to prices quoted. All materials on this page Shipped Not Prepaid from Chicago, Eastern Iowa co Philadelphia.

See Page 3 for Estimated Freight Charges under Interior Trim.

WINDOW PARTING STOP



Made of clear White Pine and cut in random lengths. Size ½ by ¹³/₁₆ inches. Ship. wt. per 100 lineal feet, 10 lbs.

274 H 669-Per 100 lineal feet . . Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia, Pa.

WINDOW BLIND STOP



Made of clear White Pine. Size 3/4 by 13/8 inches. In random lengths. Ship, wt. per 100 lineal feet, 30 lbs.

274 H 668—Per 100 lineal feet 95c Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia, Pa.

DOOR-WINDOW STOPS



O-G Ship. wt. per 100 lineal ft., 15 lbs. Prices are for 100

Article	Size	Yellow		
Number	In.	Pine	Gum	Oak
			01.00	04.70
274 H 005	78 X1 78			
2/4 II 000	78 X1 78	/3C	1.25	2.25
274 H 685 274 H 686 274 H 687	36 x 1 56	65c 75c	\$1.00	\$1.70



Round Edge Stops

Ship. wt. per 100 lineal ft., 20 lbs.

Prices are for per 100 lineal feet.

Number	In.	Pine	Gum	Oak
274 H 683 274 H 684		65c 85c	\$1.00 1.25	\$1.70 2.25
Shipped P	romptly N	of Prehai	d from (Chicago

Eastern Iowa or Philadelphia,

APRONS AND STOOLS

Made from selected woods; and machine sanded. Prices are per 100 lineal feet in random lengths, 8 to 16 feet. For specified lengths, add 10 per cent. Shipped Not Prepaid from Eastern Lowa.

274 H 704-Window Apron. Size 3/4 by 31/2 inches. Ship. wt. 100 inches. Ship. s feet, 70 pounds

Yellow Pine \$2.55

274 H 710—Artcraft
Apron. To match
Artcraft trim. Size ½
by 3¼ inches. Ship.
wt. 100 feet, 60 pounds.

Yellow Pine\$2.55 Gum..... 3.15 5.65

274 H 703—Window Stool. Size 11/8 by 31/2 inches. Ship. wt. 100 feet, 90 pounds.

Yellow Pine\$4.50 Gum.... Red Oak . 5.30



PICTURE MOULDING

A handsome Moulding that matches Craftsman trim. Size 5% by 15% inches. Prices are per 100 lineal feet in random lengths. Ship. wt. 100 ft. 20 lbs. 274 H 689— Yellow Pine...\$1.08

DOOR and WINDOW CASINGS

Mission Head Casing

Modern—simple—plain! Can be used with any side casing. May also be used for square edge Base Blocks. Prices are per 100 feet in random lengths, 8 to 16 feet. Ship. wt. 135 pounds. Not Pre-

274 H 699—Size 11/8 by 51/2 inches. Yellow Pine... Plain Red Oak.

Round Edge Casing

Round Edge Casing.
Can be used as Mullion or Side Casing.
Ship wt. per 100 ft. 85 lbs.
274 H 690—Round Edge (as pictured).
Yellow Pine, ¾ by 4¼ inches \$3.35
Oak, ¾ by 4¼ inches 8.10
274 H 694—Square Edge (similar to round edge but with square corners).
Yellow Pine, ¾ by 5½ inches. \$ 3.85
Oak, ¾ by 5½ inches. \$ 11.70

Craftsman Casing



New Arteraft design Mullion casings to match new Arteraft trim. Priced per 100 lineal feet in random lengths, Average ship. wt. per 100 ft. is 100 lbs.

Gum Oak \$4.05

A two-member Head and Side Casing, Prices are per 100 lineal feet in random lengths. Not Prepaid.
274 H 696—Casing. % by 3½ inches. Ship. wt. 100 lineal feet, 50 lbs.
Yellow Pine. .\$2.55 Red Oak. \$6.80 274 H 711—Back Band: ¾ by ½ 6 inch. Ship. wt. 100 lineal feet, 22 lbs.
Yellow Pine.67c Red Oak. .\$2.05

Arteraft Casing

Up-to-date—artistic—yet low priced. Prices are per 100 feet in random lengths. Not Prepaid.

274 H 718—Casing: ½ by 3¼ inches. Ship. wt. 100 lineal feet, 60 lbs. Y. Pine, \$2.55 Gum, \$3.15 Oak, \$5.65 274 H 719—Back Band: ¾ by ½ inch. Ship. wt. 100 lineal feet, 22 lbs. Y. Pine, 67c Gum, \$1.15 Oak, \$2.05

For Exact Lengths of Casing Add 10 Per Cent to Price

Standard Designs EXTERIOR TRIM and MOULDINGS

Ward's low prices make your building dollar go Farther



You can pay more for your exterior mouldings—but why should you? We make our mouldings of clear Fir—the ideal wood for exterior use because it resists weather, takes paint well and is very economical.

Article No.	Size, Inches	Price
274 H 1211 274 H 1212	3/4 x 2 3/4	\$1.90 2.30
274 H 1212	3/4 x 3 5/8	2.50
274 H 1214	3/4 x 4 1/4	2.95

Bed Moulding

Ward's Clear Fir Mouldings are the standard designs used extensively by architects. There is no necessity of paying big prices for your home improvements when materials cost you so little

Article No.	Size, Inches	Price
274 H 1216 274 H 1217	3/4 x 13/4 3/4 x 2	\$1.10 1.25
274 H 1218	3/4 x 21/4	1.40

Estimated Freight Charges—Page 3. Easy Payments—Page 4.

Bed Moulding

This style Bed Moulding comes in one size only, in random lengths from 10 to 16

teet.			O.E.o.
274 H	1219-3/x11/4	inches	. 85c

Mouldings are priced per 100 lineal feet in random lengths 10 to 16 feet. For specified lengths add 10% to prices listed. Average shipping weight per 100 lineal feet, 27 pounds. Estimated Freight Charges—page 3. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

Water Table Drip Cap

Look over every foot of drip cap around your house and replace the weather rotted pieces with this fine quality clear Fir. It will more which this line quality clear Fit. It will most than repay you by preventing seepage of water into foundations. Average shipping weight per 100 lineal feet, 36 pounds. Shipped Not Prepaid from Chicago, Eastern

Article Number	Size, Inches	Price
274 H 660	1 1/8 x 2	\$2.50
274 H 661	1 1/8 x 2 1/2	3.05

WHITE PINE LATTICE



274 H 666--Per 100 lineal feet. 59c 274 H 667—Per 100 lineal feet. 81c

Shipped Not Prepaid from Mills in Chicago, Eastern Iowa or Philadelphia.

T-ASTRAGAL



3 108. 274 H 713—White Pine, Each..... 274 H 714—Red Oak, Each...... 274 H 715—Gum, Each.....

HARDWOOD THRESHOLD



Replace worn down thresholds with this fine machine finished Oak Threshold. Ship.

wt. each, 2/2 lbs.
274 H 720—Size 3/8 by 3 3/4 inches.
274 H 720—Size 3/6 by 3 3/4 inches. 2 ft. 9 in. long
3 ft. 1 in. long
4 ft. 1 in. long
5 ft. 1 in. long
Shipped Not Prepaid from Chicago,
Eastern Iowa, or Philadelphia

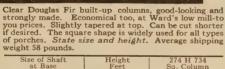
O. G. BARN BATTENS



Make your barn weather-tight, close up Make your barn weather-tight, close up the open seams with Ward's clear Fir O. G. Barn Battens. Furnished in random lengths. Size 34 by 214 inches. Ship. wt. per 100 lineal feet. 25 pounds. 274 H 678—Per 100 lineal feet. \$1.60 Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

A new porch will improve your home— PORCH MATERIALS See how little it costs at Ward's for

SQUARE COLONIAL COLUMNS



Size of Shaft	Height	274 H 734
at Base	Feet	Sq. Column
8 x 8	8	\$3.20
10 x 10	8	4.05
10 x 10	10	4.90

ROUND COLONIAL COLUMNS

Columns of finest Clear Fir. Pieces firmly held by a lock joint, cemented with waterproof glue. Can be cut shorter. Tapered to 1-inch smaller diameter at top. Carefully machined and smoothed. Prices include cap and base. 274 H 735—State diameter and height.

6 inches 8 feet 30 lbs, \$2.45 8 inches 8 feet 42 lbs, 3.00	Diam. at Dasc	Height	Simp. w.c.	Each
				\$2.45
	10 inches	8 feet	58 lbs.	4.05
10 inches 9 feet 65 lbs. 4.65				
12 inches 10 feet 115 lbs. 6.65	12 inches	10 feet	115 lbs.	6.65

Colonial Columns Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

For Easy Payments See Our Budget Plan on Page 4

SQUARE PORCH BALUSTERS

A practical square porch baluster. Made of clear Fir—a weather resisting wood of unusual strength that takes paint readily and will resist rot during years of exposure. Size 13% by 13% by 24 inches. Ship. wt. each, 1 lb. 274 H 725-Each.

Long lengths, 10 to 20 ft. Per ft. .3c Shipped Not P-Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

Colonial Porch Newels

These porch newels are of the latest design and are very popular for all kinds of porches.

You can rebuild your old porch or build a new one without difficulty, using the materials shown on this page. They are made from carefully selected lumber by expert workmen and priced to save you woney. All material is money. All material is carefully machined and smoothly sanded ready for painting.

Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

\$1.15

Very neatly designed newel of clear Fir. 4 ft. long, diameter of shaft at base, 8 in. Price includes base and ball cap. Ship.

COLONIAL BOTTOM RAIL

Made from clear Fir, 5 in. by 5 in. square, and 4 ft. long. Exceptionally well constructed. Cap is furnished as shown. Ship. wt. each, 12 lbs.



Popular Colonial porch rail of clear Fir. Very neat in appearance and smooth, ready for painting

Size 13/x31/2 inches. Shipped in random lengths. For specified lengths add 10 per cent. Ship. wt. per foot, 11/4 lbs. 274 H 724-Per lineal foot

Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

COLONIAL TOP RAIL



These rails harmonize well with turned or square columns and balusters. Made of clear Fir. Size, 14x312, inches. Shipped in random lengths. For specified lengths add 10 per cent. Ship, wt. per foot, 11/4 lbs.

274 H 723—Per lineal foot......6c Shipped Not Prepaid from Chicago, Eastern Iowa, or Philadelphia.



274 H 734 Square Column







CONVENIENT DISAPPEARING STAIRWAY

Make your attic a useful part of your home with an inexpensive, space-saving disappearing stairway. To open, just pull the cord—the heavy tension spring counterbalance lets the stairway slide gently into place. To close, simply raise it, and give a slight push upward. It goes up so easily a child can operate it. When closed, the stairway lies flat along the attic floor entirely out of the way. All that shows from below is a neat wood panel in the ceiling. The panel is in natural White Pine, smoothly sanded and ready to be finished to match other woodwork in your home.

Trim for ceiling opening not included. See Page 78 for prices of trim. Stairway is furnished set up with complete instructions for installing. Allow 4 to 6 feet beyond opening for stairway when closed. Furnished in sizes listed below.

Height	Finished Opening	Floor Space at Base
from Floor	Size in Ceiling	Required for Stairs
to Floor	Ft. In. Ft. In.	When Open
7 ft. 7 in.	2-0 x 5-6	4 feet 9 inches
8 ft. 1 in.	2-0 x 5-6	5 feet 0 inches
8 ft. 7 in.	2-0 x 5-6	5 feet 3 inches
9 ft. 1 in.	2-0 x 5-6	. 5 feet 7'inches
9 ft. 7 in.	2-0 x 6-0	5 feet 10 inches
10 ft. 1 in.	2-0 x 6-0	6 feet 1 inch

274 H 866 — Without hand rail. Shipping weight 150 \$29.50 pounds 274 H 867—With hand rail. Ship. wt. 150 lbs... 31.00

Be sure to state if you want hand rail. Shipped Not Prepaid from Mill near Pittsburgh, Pa. 31.00

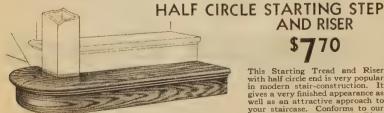
FACE AND WALL STAIR STRINGER



These illustrations show the relative positions in which the stringers are used. The dotted lines indicate the way stringers are ordinarily cut. The horizontal line indicates the tread and the perpendicular line indicates the riser. We do not cut the stringers for treads and risers because the space allotted for stairs and the height of ceilings differ in almost every building.

Both Wall and Face stringers are $\frac{3}{4} \times 11\frac{1}{4}$ inches. Face Stringer is square edged while the Wall Stringer is furnished with one rounded edge. Average shipping weight per lineal foot, 3 pounds.

Derniger is furmance	With one rounded sugar			
Kind of Wood	Lengths Furnished	Prices are	274 H 766	274 H 767
Yellow Pine Gum Plain Red Oak	10, 12, 14, 16 ft. 10, 12, 14, 16 ft. 10, 12, 14 ft.	Per lineal foot Per lineal foot Per lineal foot	14c 18c 30c	14c 18c 30c



AND RISER

This Starting Tread and Riser with half circle end is very popular in modern stair-construction. It gives a very finished appearance as

well as an attractive approach to your staircase. Conforms to our shown at top of page. Made for right and left hand ends. Illustration shows left hand end. Be sure to state whether circle end is for right or left hand side when facing stairs. 274 H 765—Average shipping weight 30 pounds each

274 H 765—Average shipping weight 30 pounds each. Yellow Pine (specify right or left hand). Each... Gum riser, Oak tread (specify right or left hand). Plain Red Oak (specify right or left hand). Each... Each. 8.70

Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia, Pa.

If you were planning to sell your home you'd tear out that old enclosed stairway and put in a modern open one . . . for a new stairway would increase the selling value of your home out of all proportion to the little you spend. If a new stairway makes a home better to buy ... surely it makes it better to live in for you yourself!



Stair Steps or Treads are carried in stock in Yellow Pine and Plain Red Oak. Size of each tread $1\frac{1}{16}$ inches thick by $11\frac{1}{4}$ inches wide by 3 feet 5 inches long. They have one edge rounded and are machine dressed and smoothed on the top side. Average ship, wt. each 12 lbs.

Size of each riser, $\frac{3}{4}$ inch thick by $\frac{71}{2}$ inches wide by 3 feet 5 inches los Surfaced and machine smoothed on face side. Furnished in Yellow Pine, Gu or Oak. With Gum Risers we recommend Oak Treads. Ship. wt. each 5 lbs.

Kind of Wood	274 H 762—Stair Steps	274 H 763—Stair Riser
Yellow Pine		25c each
Gum	\$1.45 each	45c each



Stair Winders are used for stairways making a right angle turn without a landing. This complete set includes three treads, two risers and two pieces of cove moulding. It is suitable for all stairways up to 3 feet 5 inches wide. For wider stairs write for special prices.

Important—Winders are furnished for right hand or left hand turns. Be sure to specify which you desire. Illustration above shows a set of right hand winders. Shipping weight 50 lbs. per set. Shipped Not Prepaid from Chicago, Philadelphia or Eastern Iowa.

274 H 732—Set of Stair Winders. State Wood.
Oak or Birch..........\$7.00 Yellow Pine\$5.25

Fillet and Subfillet for Stair Rails



Use with stair rails on opposite page where 1½-in. square balusters are desired. Sub-Fillet is 1½6 by ½-inch plowed 1½ by ½ in.



Per Lineal Foot	Sub-Fillet 274 H 755	Fillet 274 H 754
Yellow Pine	1c 1½c	1c 1c
Dista Dad Oak	2160	11/20

Average ship, wt. per 100 feet, 25 lbs. Shipped Not Prepaid from Chicago, Eastern Iowa, or Philadelphia, Pa.



The top or landing tread used on platforms and second floor levels is generally not as wide as the regular stair tread. We made our landing treads 1½6 inches thick, 3¼ inches wide, and 3 feet 5 inches long. They are rabbeted on the inner edge to ½6 inch thickness so as to finish level with flooring on platforms or second floor halls. Average shipping weight each 2 pounds. each, 2 pounds.

Shipped Not Prepaid from Chi-cago, Eastern Iowa or Philadel-phia, Pa.



Every open stringer stairway requires Return Nosing for each step. This is a standard pattern 1½ by 1½ inches. When ordering allow about three inches per tread for mitering. Average ship, wt. per 100 feet, 50 pounds.

274 H 756—State Wood.
Yellow Pine, Lineal foot...
Plain Red Oak. Lineal foot.

Shipped Not Prepaid from Chicago, Philadelphia or Eastern Iowa.

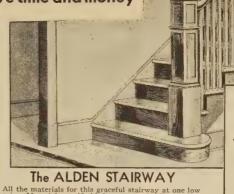




Stair Angles and Newels

All newels are hand smoothed and made from thoroughly kiln-dried, one-inch clear lumber; each lock joint glued. We furnish loose bottom cap with all angle newels. NOTE: 274 H 768 is 4 ft. 5½ in. high, 8x8 in. base and 6x6 in. shaft, suitable for open or closed string board; base of post 20 in. high allowing for one or two risers; 274 H 771 is for use only with Colonial Easement No. 1042.

Article	Width of	Length	Ship, Wt.	P	rices Per Post	
Number 274 H 770 274 H 768 274 H 771 274 H 772	Shaft 5 x5 in 8 x8 in. 3 1/4 x3 1/4 in. 3 1/4 x3 1/4 in.	5 ft 6 in 4 ft. 5½ in. 4 ft. 2 in.	15 lbs.	\$2.90 4.85 3.50 3.80	\$3.15 5.10 3.70 3.95	Red Oak \$4.85 6.50 3.95 4.15

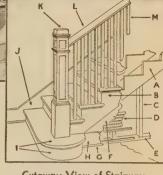


The ALDEN STAIRWAY

All the materials for this graceful stairway at one low price, Materials specified below are regular first quality materials shown elsewhere on these two pages. This Stairway is 16 risers or 10 feet high. Write for prices on other complete sizes. Stairway includes: 274 H 765—1 Starting step and riser. 274 H 765—1 Starting step and riser. 274 H 763—14 Treads. 274 H 766—14 Landlet tread. 274 H 766—14 Landlet tread. 274 H 766—1 Starting newel. 274 H 788—1 Wall rosette. 274 H 781—8 Lin. ft. stair rail. 274 H 785—8 Lin. ft. stair rail. 274 H 766—8 Lin. ft. fillet 274 H 767—24 Lin. ft. wall stringer. 274 H 766—8 Lin. ft. face stringer. 274 H 766—8 Lin. ft. face stringer. 274 H 767—274 Lin. ft. cove. 274 H 778—Alden Stairway Complete Vellow 274 H 778—A

STAIR MATERIALS Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia

Vellow \$34.00 Gum \$49.00 Oak \$56.00



Cutaway View of Stairway

| Columbay View of Columba | Columba J—Wall Stringer
K—Starting Newel
L—Hand Rail
M—Balusters
Cove Moulding and
Return Nosing are
shown above arrow
point "B."

STAIR RAILS

Colonial Design

Distinctive Design Distinctive Design
This pattern is 2½ by 3½ in. Rabbetted for 1¾ in. balusters. If Fillet (as illustrated) is wanted add 2c per foot to prices. For 1½ in. balusters it will be necessary to use Sub-Fillet 274 H 755 and Fillet 274 H 754 shown on page 80. Ship. wt. per lineal foot 2 lbs. Furnished random lengths. Specified lengths 2c per ft. extra. 274 H 751—Per lineal foot 22 c Vellow pine.

33c

Graceful Style

Wall Stair Rail

This rail is generally used on stairways between plaster partitions such as basement or attic stairs. Size 2 by 1¾ in. Ship. wt. per foot, 1½ 1b. Specified lengths 1 cent per foot extra. 274 H 753.—Per lineal foot: Sc Yellow Pine. 15c

Stair Rail Bolts

Special bolts are required to bolt two pieces of rail to a crook or to bolt a piece of rail to a crook or to bolt a piece of rail to a newel. 274 H 776 is used for joining the pieces of rail a complete of the pieces of rail a piece of rail a piece of rail and pieces of rail a piece of rail to a newel post. Ship. wt. each, 3 oz arail to a newel post. Ship. wt. each, 3 oz arail to a newel post. Ship. wt. each, 3 oz arail to a feet.

Estimated Freight Charges Page 3

STAIR BALUSTERS

Square Colonial (At right) Because of the size, 1½x1½x34 inches long, either three or four balusters can be used for each step. Our No. 274 H751 Hand Rail is plowed for 134-inch balusters. When the 1½ inch Square Balatters are used, order page Nos. 274 H754 and 274 H 751. Ship. wt. 11b. each. 274 H 761. 274 H 761— 5c Yellow Pine. Each. 5c Birch. Each. 12c Red Oak. Each. 12c Turned Baluster (At extreme left) Size 14x14x28 in. and 32 inches long. Average ship. wt. 1 lb. each. State length wanted. 274 H 760—Yellow Pine. Each. 35c Red Oak. Each. 38c **Turned Colonia!** (At left) Size 11/4x11/4x37% inches long. Ship. wt. 1 lb. each. 274 H 773— White Pine. Each. 45c Oak. Each. 45c

Acorn Tip

Gum. Each......25c Plain Red Oak. Each..30c

Hand Rail Bracket Used with wall stair rail No. 274 H 753. Back plate, 3 by 1½ inches. Furnished with screws. Ship. wt. each, 13 az.

with stream 13 oz. 274 H 774—Sand 20c Brass. Each 2274 H 775—Dull Brass. 20c



COLONIAL STAIR MATERIAL

On this page you'll find all the matched materials and accessories to build or rebuild Colonial Stairs—Stair and Angle Newels above at left—popular Stair Balusters at left—Colonial Easements below—Stair Rail at left—etc.

And prices at Ward's are so unusually low now, you will be convinced that this is the time to build those much-desired and very popular Colonial Stairs.

See the inside front cover of this catalog for color illustration of Colonial Stairway.

Colonial Gooseneck

Match Colonial stair rail 274 H 751, and curved to match the rise and run of our regular stair step and risers. Used to join a rising rail with a level rail. Size ½ inches rise, 8½ inches run. Carefully made by expert workmen, Smoothly sanded ready to finish. Shipping weight each, 6 pounds.

774 H 1040—State wood.
Yellow Pine. Each 6.85
Oak. Each 6.85

Rise and Level Turn

For either right or left hand turns. State which kind of turn you want. For use with stair rail No. 274 H 751. Shipping weight each, 6 pounds. Not Prepaid.

274 H 757—State wood. \$3.40
Yellow Pine. Each 3.40
Birch. Each 3.40
Oak. Each 3.40

Colonial Easement

For bringing rail to proper level to meet Newel head. Used with Colonial Newel No. 274 H 771. Has ¾ inch diameter hole to fit over pin in Newel post. Has 7½-inch rise and 8½-inch rin. Furnished in Yellow Pine, Birch and Oak. Shipping weight 2 pounds.

Quarter Level Turn

Colonial Design Quarter Level Turn for use on landing around well hole openings. Either right or left hand. To match stair rail No. 274 H 751. Furnished in either Yellow Pine, Birch or Oak. Ship. wt. each 61bs. Not Prepaid.

Oak. Each 5.40
All Stair Material Shipped Not
Prepaid from Chicago, Eastern
Iowa or Philadelphia,





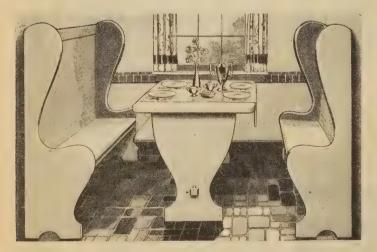
These are the Kind of Conveniences that make Kitchen Duties Easier



A WARD Model Kitchen is the answer to more leisure hours. There's a convenient place for everything. Notice the large roomy cupboard for pots and pans, so handy to the stove and within arms reach of the sink—lots of steps and work saved there! Notice how close the china cabinet is to the breakfast alcove—more steps saved there. And those convenient drawers, aren't they fine for silverware and linens?

ON THE opposite page you'll find "Nu Kitchen Cases" designed to beautify your kitchen ... priced to save you many dollars.

The new table top Range—automatic Refrigerator, built-in Ironing Board, modernistic Plumbing fixtures, Kromatyle Walls and other furniture can all be purchased from Ward's at a big saving. See your copy of Ward's General Catalog for articles not shown in this book.



COZY ALCOVE DINETTE SET

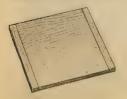
 $T^{\rm HIS}$ breakfast set is unbelievably low priced and it's smartly designed. Made for specially built-in nook, but is often used in a corner of the kitchen, sun-porch, etc., makes a little dining room all in itself.

Made of Clear Western White Pine. Large enough for 4 adults. Floor space required is 5 ft. 6 in. wide by 3 ft. 8 in. long. Table is 2 ft. 2 in. wide by 3 ft. 8 in. long and 2 ft. 6 in. high. Seats are 1 ft. 6 in. wide by 3 ft. 8 in. long and 1 ft. 6 in. from floor. Seat back is 3 ft. 4 in. high from floor. Comes in unfinished natural wood. All parts smoothly sanded ready for stain or painting to match your woodwork.

Shipped to you knocked down in sections to save you freight charges. Parts are perfectly machined and easily put together. Anyone can assemble it, simple instructions included with each set. Like all Ward's building materials it may be bought on our Easy Payment Budget Plan. See page 4 for full details. Average shipping weight 180 lbs. per set. For Estimated Freight Charges see page 3.

Shipped Not Prepaid from Mills in Chicago, Eastern Iowa or Philadelphia.

MAPLE CUTTING BOARDS



This hardwood board is substantially made of good quality Maple. Full 18 inches square and % inches thick. Smoothly sanded. Used for cutting bread, vegetables, meats, etc. Shipping weight 1½ pounds. Mailable. Shipped Not Prepaid from Mills in Chicago, Eastern Iowa or Philadelphia. 274 VH 896—Each....98C

DRAWERS FOR KITCHEN CASES



These drawers are all 18 inches deep. They are suitable for pantry, china closet or linen closet. Exposed portion is made of White Pine and the balance of soft wood.

Shipped knocked down. Average shipping weight each 7 pounds.

274	VH	877-	Cabinet	Drawers

Width	Height		Price	
Ft. In.	Inside	Outside	Each	
1-5 1/2	2 in.	2 ¾ in.	\$1.00	
151/2	4 in.	4% in.	1.00	
3—0	6 in.	6¾ in.	1.85	

Mailable. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia.

Easy Payments - Page 4

WARD'S "NU-KITCHEN" CASES

Made to Save You a Lot of Steps . . .

... Priced to Save You a Lot of Money

EACH case is a complete unit in itself with space for dishes, pots and pans, utensils, etc. But they are designed so that any case may be used in combination with other cases as shown on the opposite page. Then too, the sections are interchangeable—any base can be used under any top. The top section is a separate unit and can be located at any convenient height. Shelves in both sections are adjustable.

We've made "Nu-Kitchen" cases of clear Western White Pine. They came to you smoothly sanded ready to stain or paint. Door panels are of 3 ply Fir to prevent warping. Complete Cabinet hardware of the finest design is included. You have a choice of two types of table topseither close grained hard maple or heavy gauge white enamel with slightly raised edges to keep fluids from running off.

These Features Are in All Ward's "Nu-Kitchen" Cases



Latest design cabinet hardware furnished in wrought steel with sanded brass finish. Complete with



Removable cutting board of clear hardwood. Shaped grip underneath. Convenient for cutting vegetables, rolling pastry, etc.



Utensil drawer specially divided into five roomy compartments to keep knives, forks, teaspoons, and other utensils separate.



"Nu-Kitchen" Super Case

Lots of room here for pots and pans, cooking utensils, dishes in fact a place for everything. This is Ward's Super De Luxe model—practically a kitchen in itself. Recommended for those who want the finest. The cupboards are extra roomy and easy to get to. You'll like the six large drawers—plenty of room for everything.

The upper case is 4 ft. 11% in. wide by 4 ft. 41% in. high by 121% in. deep. Has 5 convenient shelves to hold dishes, canned goods, preserves, groceries, etc.

The lower section measures 6 ft. 8½ ft. in. wide by 2 ft. 10¾ in. high by 20 in. deep. Table top furnished in hardwood or enameled 16-gauge metal. Has ample drawer space and an extra large, roomy section with one adjustable shelf. In natural wood smoothly sanded. Shipped ready to assemble and paint. No experience necessary to put together, simple directions furnished. All parts cut to size. Hardware, cutting board, shelves and six drawers included.

274 H 1225—Top section. Shipping weight 160 pounds\$14.25 274 H 1225—Pop section services with maple top. Shipping weight

274 H 1227—Bottom section with white enameled metal top. Shipping weight 150 pounds. \$28.10

Shipped promptly Not Prepaid from Mills in Chicago, Eastern lowa or Philadelphia, whichever is nearest you. State whether bottom section is wanted for a right or left hand corner.



"Nu-Kitchen" Dresser

This "Nu-Kitchen" Dresser is becoming more and more popular because of its good looking appearance, convenience and economy.

Upper cabinet is 4 ft. wide by 3 ft. 9 in, high by 11 in, deep. Plenty of room here for a big set of dishes. Has three adjustable shelves, Doors are glazed with clear glass.

Doors are glazed with clear glass.

Bottom section is 4 ft. wide by 3 ft. high by 17 in. deep. Two large drawers for linen, silverware, etc. and two roomy cupboards for pots and pans. Made of Clear Western Pine with Fir Panels in doors and hardwood table top. Hardware and cutting board included. In natural wood smoothly sanded. Shipped ready to assemble and paint. No experience needed to put together. Simple instructions with every case. Can be installed in right or left hand corner. Ship, wt. 200 lbs.

Shipped Not Prepaid from C Eastern Iowa, or Philadelphia, Pa. Chicago,

For Estimated Freight Charges see page 3 under Millwork, K. D.



"Nu-Kitchen" Utility Case

This cabinet was designed for small kitchens where space is limited. It has all the quality features of Ward's finest cabinets but is smaller. Can be installed in right or left hand corners.

The upper section measures 3 ft. 43½ in. wide by 4 ft. 4½ in. high by 12½ in. deep. Has 5 shelves which can be adjusted to desired height. The lower section is 3 ft. 6½ in. wide by 2 ft. 10¾ in. high by 20 in. deep. In natural wood smoothly sanded. Shipped ready to assemble and paint. Hardware, cutting board and five utensil drawers included.

274 H 1230-Top section. Ship. wt. 130 lbs.....\$10.00 274 H 1231—Bottom section with maple top. Ship. wt. 100 lbs. \$18.70
274 H 1232—Bottom section with white enamel metal top. Ship. wt. 100 lbs. \$19.85
Shipped promptly Not Prepaid from Chicago, Ill., Eastern Iowa or Philadelphia, Pa.

See page 3 for Estimated Freight Charges under Millwork, K. D.



"Nu-Kitchen" Table Case (May Be Used With Above Top)

This handy table case was designed for use under top Inis nandy table case was designed for use under top section pictured above. It is generally used on each side of a sink to provide a handy space for dishes. Then too, it is often used separately as a kitchen work table. Notice the large cupboard and the five handy drawers. Size 5 ft. 11/4 in. wide, 2 ft. 103/6 in. high, 20 in. deep.

274 H 1235—Maple top.....\$20.50 274 H 1236—White Enameled top.....

Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia. State whether for right or left

CONVENIENT Built-In ADDITIONS TO ANY HOME

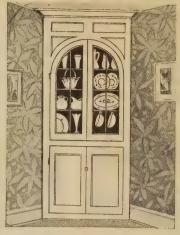
BUILT-IN CABINET IRONING BOARD



FOR ESTIMATED FREIGHT
CHARGES SEE PAGE 3

Trim is of clear Fir smoothly sanded, ready to finish to match your other woodwork. Door panels are of 3 ply clear Douglas Fir.
Glass door knob and friction catch included on cabinet door. Ironing board will not warp because it is clear Western White Pine full 1½-inch thick, 11½ inches wide and 62 inches long. Sleeve board is ¾ inches thick and 5 inches wide, 24 inches long and sets 4 inches above Ironing Board when in use. Shipped in carton set up ready to install. Just cut the plaster and laths between two studding, insert the cabinet and nail on the trim. Shipping weight 50 pounds. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia, Pa. weight 50 pounds. Philadelphia, Pa.

274 H 888—Built-in Cabinet Ironing Board......\$5.95



CORNER CUPBOARD

Distinctly Colonial—adds Early American charm to your dining room. Easy to install in any corner of new or old home. Back is completely enclosed to conceal walls behind. Three shelves in upper section, one shelf in lower section. Upper doors glazed with clear glass set with wood stops. Dimensions: 3 ft. 6 in. across front—2 ft. 5½ in. from corner to edge. Height 8 ft. 6 in. Complete with sanded brass hardware. Ready to put together. Smoothly sanded natural wood ready to stain or paint. Ship, wt. 140 lbs. Shipped Not Prepaid from Chicago or Philadelphia, Pa. 274 H 1137—

274 H 1137-White Pine. \$28.50 274 H 1139-Gum....\$31.00 274 H 1138-Red Oak \$39.95 How cupboard fits corner.

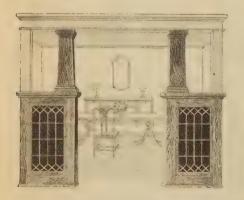


MANCHESTER CHINA CLOSET

Yellow Pine Plate Glass Mirror

Your extra set of guest china . . . all the table linen . . . the silverware and crystal-ware! This beautiful built-in China Closet is just the thing to keep them in. It's suitable for old or new homes. Measures 5 ft. wide, 14 in. deep, 7 ft. high. Sides are unfinished. Leaded glass doors. Two adjustable shelves in upper and lower section. All sanded brass hardware furnished; also casing and cap trim to fit around front of china closet. Comes in natural wood, smoothly sanded, ready to paint or stain to match your woodwork. Furnished either with plate glass mirror as pictured or with attractive wood panel in place of the mirror. Ship. wt. 300 lbs. Shipped promptly Not Prepaid from Chicago or Philadelphia, Pa.
274 H 803—Yellow Pine (wood panel)... \$48.75

274 H 803-Yellow Pine (wood panel)...\$48.75 274 H 804--Oak (wood panel) 274 H 801-Yellow Pine (plate glass 274 H 802-Oak (plate glass mirror):.

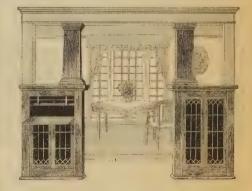


BOOKCASE COLONNADE

A handy book case and a handsome colonnade all in one.

MISSION COLONNADE

Trim and jambs not included. For prices see pages



BOOKCASE and \$4

You'll like this combination writing desk and book case colonnade. It's suitable for openings, 8 to 12 feet wide and up to 8 feet high. Columns are 7 in. square slightly tapered at top and 3 feet 10 in. high. May be cut down to fit any height less than 8 feet. Cases are 2 ft. 6 in. wide by 4 ft. 2 in. high and 10 inches deep inside.

Shipped complete with all hardware. Furnished in natural wood smoothly sanded to take any finish. Two leaded clear glass doors in each bookcase. Writing desk (for left hand side only) has convenient shelves, pigeon holes and strong drop leaf writing shelf. Ship, wt. 250 lbs. Shipped promptly Not Prepaid from Chicago or Philadelphia.

274 H 821—Yellow Pine. \$40.50
274 H 822—Oak 47.25

Jambs and trim not included. For prices see pages

Jambs and trim not included. For prices see pages

Popular type • GARAGE DOORS • Saving priced

SWINGING TYPE DOORS





Low Priced for Extra Savings

Strongly constructed doors of edge-grain best grade clear Douglas Fir. These doors are built with the same care as our best interior doors for your home. All four corners are mortised and tenoned joined and securely held with steel pins. With ordinary care, this construction prevents sagging and bulging, but in addition, these doors have the same rigid construction at the center cross-member, bracing it further against strain or weakening. This fine construction assures you of a door as good as can be bought, capable of giving you the long service you want. Ward's low price is due to our economical method of selling direct to you by mail—and shipping to you direct from the mill. Six light windows with good clear glass securely held in place by wood stops. Door comes to you smoothly sanded and ready for painting.

Full 13/4 inches thick. Each door is 4 feet wide by either 7½ or 8 ft. high. Shipping weight per pair, 230 lbs. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia, Pa. Be sure to state height.

274 H 496—8 feet wide by 7 ft. 6 in. high. Per pair.

\$10.45
8 feet wide by 8 feet high. Per pair.

10.60
For Hinges and Locks See Ward's General Catalog.

SEE PAGE 3 FOR ESTIMATED FREIGHT CHARGES

No Worry About Snow or Wind . . . When Doors Slide In!

SLIDING TYPE DOORS



These doors are for installation on overhead-track, sliding-door hardware. Built of clear Douglas Fir in exactly the same manner as doors at left. They give you every advantage of durability and long service. All door corners and center cross-member made with mortise and tenon joints, securely held with steel pins to prevent sagging or warping.

The elimination of worry about snow blocking the garage, or wind slamming doors into cars, has made this type of door very popular. They may be installed with one section as a service door—or all three as a sliding unit. Will fit any type of sliding door hardware you have.

Windows glazed with good clear glass held with wood stops. Full 1¾ inches thick Door comes to you smoothly sanded and ready for painting. Each door is 2 feet 8 inches wide. The three doors fill opening 8 feet wide. Be sure to state height wanted. Shipping weight per set 250 lbs. Shipped Not Prepaid from Chicago, Eastern Iowa or Philadelphia. Be sure to state height.

274 H 499—8 feet wide by 7 feet 6 inches high. Per set. \$10.95

For Sliding Door Hardware See Ward's General Catalog.

SEE PAGE 4 FOR EASY PAYMENTS

NEW OVERHEAD SLIDING DOORS

... Just a Slight Pull . . . and UP THEY GO-Out of the Way!

Here's exactly the garage door you've been waiting for! Let the wind blow its worst-there's no danger of this door slamming into your car as you enter or leave the garage. Let the snow pile knee high—this door slides right up past it! It's the most practical, trouble-free Garage Door-and best of all, it's priced right down where its purchase is a practical investment and in no sense a luxury!

Even a Child Can Operate It

The Bilt-Rite Overhead Garage Door can be operated by a child. To open it from the outside just give a slight tug on the handle—the counter-balancing weights do the rest. No need of a service door. To open from the inside, just press your foot against the bottom—and up it goes. All pulleys and rollers are roller-bearing. Operates without banging—moves slowly and positively has no springs or lever to get out of order, safe for women or children. Cross braces at the top and bottom hold the door securely in a permanently rigid, sagproof and warp-proof unit. All former garage door troubles are eliminated. Nothing to balk,—nothing to repair—nothing to cause trouble. Every installation is permanent.

Set consists of pair of 274 H 496 doors (described above) securely doweled and glued into a single rigid unit, and complete hardware, including stranded flexible steel cables, roller-bearing pulleys, adjusting blocks, center hanger and track, side guides, counter weights, two steel cross-braces, special weatherstripping, overhead locking bolt and cylinder night latch.

Requires 8-inch minimum head room over top of door and 8 inches at side to allow space for weights. Shipped Not Prepaid from Chicago, Eastern lowa or Philadelphia.

274 H 495—Door 8 ft. wide, 7 ft. 6 in., high, including all hardware.

274 H 495—Door 8 ft. wide, 7 ft. 6 in., high, including all hardware. \$29.95
Shipping weight 455 lbs
Door 8 ft. wide, 8 ft. high, including all hardware.
Shipping weight 475 lbs
30.25

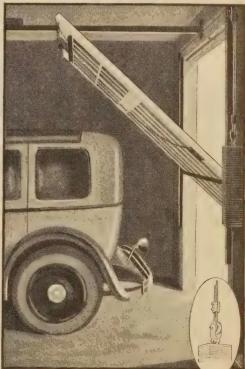
Don't tug or drag at your present garage doors. Convert them to this modern, trouble-free type, with the hardware described above. Cross-fraces securely fasten any type of door, either double swinging or triple sliding into a single rigid unit. Shipped Not Prepaid from Stock.



This shows the door open. Note Inis shows the door open. Note that it gives you a clear opening, the full width and height of the door frame. Note simplicity of parts and installation—the secure manner in which the door is fastened in place. Door rests securely in this position—the counter-balancing weights hold it firmly.



This is how door slides from open to closed position. Perfect counterbalancing and no springs permit slow and smooth operation. It may be opened to any position—and will stay there because the counter-balancing weights offset the weight of the doors.



This picture illustrates what little space is required by this door. If your garage provides only 6 inches space between closed door and bumper of your car, it will operate with plenty of clearance. Doors will fit garages with any type of roof. Note also the illustration in the insert showing handy cable adjustment clip.

Here again you can see the simplicity of the installation. Large, detailed, pictured directions show you how to put it up,

KROMA-TYLE for bath and kitchen walls



For Estimated Freight Charges See Page 3

CERAMIC tile makes the most beautiful, and long-lasting walls for bathrooms and kitchens. But of course tile is quite expensive, and that's why Kroma-Tyle is so popular with modern home builders.

COLORED LIKE TILE . . . BUT

costs LESS than half as much!

Kroma-Tyle is the modern substitute for tile. Its low price helps many thousands of home owners to realize a cherished ambition of bright, colorful, sanitary walls. With Kroma-Tyle you can enjoy the beauty

and luxury of tile at about Half the cost.

Kroma-Tyle offers you many of the features of tile—the same lustrous beauty of tile—the same delightful pastel colors of tile—the same sanitary features of tile everything the same, but the price. One of the most important advantage of Kroma-Tyle walls, and one that every woman will appreciate, is their cleanliness—all you have to do is wipe them with a damp cloth. No repainting-no redecorating-no bother; and most important of all—no extra expense.

Apply Kroma-Tyle Yourself—It's Easy to do

You can easily put Kroma-Tyle on yourself, because it goes on one piece at a time very simply with a special waterproof cement as a binder. The chair rail which is an attractive border (shown in illustrations at left) is put directly on the wall in the same way. It can be put on finished plaster or any other porous wall. A special baseboard is not necessary either—you can retain the old one or eliminate it altogether.

Kroma-Tyle is a special rust-resisting metal sheet, 6 inches square with baked-on enamel. Slightly beveled edges make it look like real tile. The colors are durable and can be washed and scrubbed for years.

State color. Always order about 5 feet extra for fitting.
574 H 590—Kroma-Tyle per square foot
574 H 591—Chair rail 21/4 by 12 inches
Special Waterproof Cement for Applying Kroma-Tyle
You need 25 lbs. for each 75 square feet of Kroma-Tyle.

574 H 592—25-pound can.... 574 H 593—10-pound can.....

Shipping weights: Kroma-Tyle 8 oz. each sq. ft.; Chair rail 4 oz. each ft. Cement 26 lbs. and 11 lbs. Shipped Not Prepaid from Stock.

VENEER PANEL DOORS



Cupboard Doors

- Kitchen Cabinet Doors
- Linen Closet Doors
- Scuttle Doors.
- Pantry Case Doors
- Clothes Chute Doors
- Package Service Doors

Furnished with White Pine rails and three-ply Fir veneer panels to prevent warping. Three sizes also furnished with selected Oak rails and panels. All doors smoothly sanded, ready for you to finish to match your woodwork. All doors 1½ inches thick. All joints are mortise and tenon for maximum strength. Side rails and bottom rails are amply large and will permit cutting down as much as ¾ inches in width and height. Eight sizes are listed below. If you want a smaller size, order next size larger and cut down to fit. Should you desire to fill a wider opening, order doors in pairs. Average shipping weight 4 pounds.

Shipped Not Prepaid from Mill in Chicago, Fastern Jowa or

Shipped Not Prepaid from Mill in Chicago, Eastern Iowa or Philadelphia, whichever is nearest you. Be sure to state size and wood wanted when ordering.

Width Ft. In.	Siz	Height Ft. In.	274 H 882 White Pine and Fir Per Door	274 H 883 Oak Only Per Door
1-0	by	1-2	52c	****
1-0	by	1-6	55c	• • • • •
1-2	by	2-0	59c	• • • • •
1-2	by	2-6	75c	
$\tilde{1}$	by	4-0	\$1.04	
1-6	by	2-0	60c	\$2,00
1-6	by	2-6	76c	2.00
1-6	by	4-0	\$1.06	3,00
1-0	by	3_0	950	

ARTISTIC CHINA CLOSET DOORS

Easy

See

Page 4





Clear Plain Glass



Leaded Crystal Glass



Leaded Art Glass

You will find many places to use these attractive Doors in your home. Especially suitable for built-in china closets, buffets and dining room or kitchen cases. The two doors at the right are both glazed entirely with plain clear glass with the exception of the four little squares in design 274 H 885, which are colored glass. The one-light plant-light plain glass doors at the left are fine for the upper sections of your kitchen cabinets, pantry cases, etc. Doors are $1\frac{1}{6}$ inches thick—solidly constructed with doweled and glued joints. Glass held in place by a wood glass bead. Leaded glass joints are neatly made and well soldered. Furnished in Yellow Pine and Red Oak. Smoothly sanded, but unfinished. Freight charges are low—see Page 3.

Furnished one size only-1 foot 6 inches wide by 4 feet high.

Shipped promptly Not Prepaid from Chicago, Eastern Iowa or Philadelphia:

Article Number	Yellow Pine	Red Oak	Shipping Weights
274 H 880	\$2.42	\$2.74	22 lbs.
274 H 884	1.62	1.93	22 lbs.
274 H 885	3.42	3.74	25 lbs.
274 H 886	3.15	3.49	25 lbs.

Big savings on colorful FLOOR T

See How Little Tile Floors Cost at Ward's

Tile is often considered too expensive for the modest home. But at Ward's low price you can have tile floors for little more than the price others ask for good linoleum. See for yourself how little it costs.

Modern home construction demands the extensive use of floor tile-in the bathroom, sun room and kitchen. It's easy to understand why this is true—floor tile lasts a lifetime, it's sanitary, easy to keep clean and will add to the appearance as well as the value of your property.



How to Order Floor Tile

Tile comes securely glued to sheets of paper with the proper spacing allowed between each piece for cementing. When ordering always be sure to allow a little extra for waste in fitting when laying.

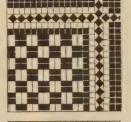
If your floor is square with no irregularities, figure square feet of tile required by multiplying width of room by length. If room has any irregularities, a sketch giving measurements must always be included when ordering patterned tile so correct amount of border to be supplied can be determined.



MOSAIC FLOOR TILE

Made of 1-Inch Squares and Hexagons

Made of 1-inch Squares and Hexagons
A popular, yet simple floor tile that makes an unusually attractive bathroom floor design. Tile floors are so sanitary, neat and easily cleaned that practically every modern home has tile kitchen and bathroom floors. Ship, wt. per square foot, 3½ pounds. 274 H 386—Black and white.
274 H 387—Red and white.
274 H 388—Blue and white. Per square foot....25c
Shipped promptly Not Prepaid from Warehouse near Cincinnati, Ohio.



BASKET WEAVE DESIGN

Made of 1-Inch Squares and 2 by 1-Inch Rectangles

Shipped Not Prepaid from Warehouse near Cincinnati. Ohio. Estimated Freight Charges, page 3.



BASKET WEAVE DESIGN

1-Inch Squares and 2 by 1-Inch Rectangles

One of the newest and most beautiful designs we carry. Your choice of three attractive color combinations. Modern home builders—and owners—are using it for bathroom, sun porch, and kitchen floors. Ship. wt. per square foot, 3½ pounds.

274 H 395—Black and white.

274 H 395—Black and white. 274 H 396—Red and white. 274 H 399—Red and white. 274 H 397—Blue and white. Shipped promptly Not Prepaid from Ware-house near Cincinnati, Ohio.



SQUARE SPIRAL PATTERN

Made of 1-Inch Squares and 2 by 1-Inch Rectangles



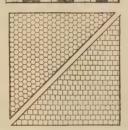
FLAGSTONE PATTERN

Made of 1 and 2-Inch Squares and 2 by 1-Inch Rectangles

A distinctive pattern at an unusually low price. Just the thing for sun porch, terrace, breakfast room or hearth. In three beautiful shades of brick red, this floor tile gives the effect of antique flagstones. Ship. wt. per square ft., 3½ lbs.

274 H 398-Per square foot

Shipped promptly Not Prepaid from Ware-house near Cincinnati, Ohio.
On Orders for Less Than 30 Sq. Ft. Add 50c for Boxing.



PLAIN WHITE FLOOR TILE

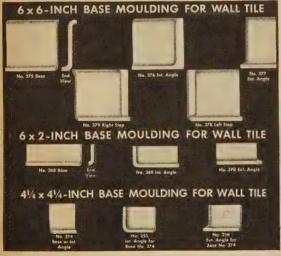
Upon entering a bathroom the floor is noticed first. And there is nothing so outstanding and beautiful as the simplicity of white tile. It's so clean and neat, giving that much desired sanitary atmosphere. And at Ward's prices are lower, too. Average ship. wt. per square foot, 3½ lbs.

1-Inch Hexagons 274 H 385-Per square foot

3/4-Inch Squares
274 H 383—Per square foot......

Shipped promptly Not Prepaid from Warehouse near Cincinnati, Ohio.

THE SMARTEST HOMES YOU'LL FIND TILE WALLS





Ward's Wall Tile is strictly first quality—as fine as you can buy—yet priced to save you money.

Two patterns of wall tile are listed below—at left three styles of caps or mouldings for finishing of top of tile wall—at right three patterns for base-boards. For each inside corner of room you need one interior angle for both cap and base. Any projecting corners need an exterior angle for both cap and base. Instructions with order. Average ship. wt. per sq. ft. 5 ths. Shipped Not Prepaid from Waryhouse near Cincinniat, Onto.



Glazed Wall Tile
274 H 380—Size 6 by 3 inche,
foot. White ... 35c Black.
274 H 384—Size 44 by 44,
sq. foot. White ... 35c Black
Green, Blue or Orchid.

Bead Tile is used for covering the sharp edge of exterior wall angles. 274 H 371— Bead 6 by 11/4 inches.

Per Lineal Ft. 18c Black Per Lineal Ft. . 20c

Cove Tile is used for lining interior wall angles.

274 H 372—Cove 6 by 11/4 inches.

White Per Lineal Ft. 18c Black Per Lineal Ft. 20c



BOX CAP TOP MOULDING FOR WALL TILE 6 x 2-INCH BULLNOSE TOP MOULDING 44×44-INCH BULLNOSE TOP MOULDING

Save on

Lumber

WARD'S can furnish anything you need in lumber—one piece or a carload. We deal direct with the largest mills. Large quantities of lumber are always in stock—all kinds, sizes and grades. You get exactly what you want.

When you buy lumber from Ward's it comes to you direct from the largest yards. You get exactly what you want—and get it quick. You don't have to pay all cash either. Take advantage of our Budget Plan of Easy Payments—see page 4.

Just send us a list of all the lumber you need for any job—joists, studding, lath, shingles—anything. We will quote the lowest possible delivered prices. There's no obligation to buy—this estimating service is Free!

FREE ESTIMATES ON LUMBER

When sending us a list of the lumber you need be sure to tell us the items you want, the number of pieces, the sizes and grades. To save you the most money tell us the purpose for which the material is to be used. We will quote you the lowest possible delivered cost.

which the mat		sed. We will quote y	ou the lowest possible delivered	cost.
Item	Standard Trade Size, In	Standard Finished Size, In.	Woods and Grades	Lengths
Barn or Drop Siding Pat. No. 116	1x6 1x8	34 x5 ¼ 34 x7 ¼	Fir—B&Btr. and "C" White Pine—"C" and No. 1 & Btr.	Mixed or Specified
Drop Siding Pat. No. 106	1x6	3/4 × 5 1/4	Fir—B&Btr. and "C" Yellow Pine—B&Btr. and No. 1 Common	Mixed or Specified
Pat. No. 117	1x6	% x5 1/4	Fir—B&Btr. and "C" Yellow Pine—B&Btr. and No. 1 Common	Mixed or Specified
Bevel	1/2 ×4	½x3½	Redwood-Clear and "A"	Mixed
Siding	½x6 ½x8	1/2 x 5 1/2	Cedar—Clear and "A" & Btr. Cypress—"B"	
	3∕4 x 8	1/2 x 7 1/2 3/4 x 7 1/2	Yellow Pine—B&Btr.	
	34 x10	34 x9 ½		
Shiplap or Sheathing	1x8	²⁵ / ₃₂ ×7 ½	Yellow Pine—No. 1 and No. 2 Common	
Bevel	1x10 1x4	25/32×9 1/2	Fir-No. 1 and No. 2 Common	
Cribbing	1x6	34 x 3 1/4 34 x 5 1/2	Yellow Pine—B&Btr. and No. 1 Common Fir—C&Btr. and Sel. Common	Mixed
Barn	1x8	34 x 7 ½	Fir—B&Btr. and Sel. Common	3.61
Boards	1x10	34 x9 1/2	White Pine—No. 1 and No. 2	Mixed or Specified
	1x12	34 x 11 ½	Common	8 to 16 ft.
Beaded Ceiling	%x4	%6x3 1/4	Yellow Pine—No. 1 Common Fir—B&Btr. and "C"	lengths
and Partition	1x4	34 x3 1/4	Yellow Pine—B&Btr. and No.	Mixed or Specified
***	1x6	34 x3 ¼	1 Common	Promise
Exterior Finishing	1x2 to 1x12 1½x2 to 1½x12	25/32x1 ½ to 25/32x11 ½ 1 ½ 6x1 ½ to 1 ½ 6x11 ½	Fir—B&Btr.	-
Lumber	2x2 to 2x12	1 1/2 x1 1/2 to 1 1/2 x11 1/2	White Pine—B&Btr., "C" Sel. and "D" Sel.	Mixed or
			Yellow Pine—B&Btr. Cypress—B&Btr.	specified
Unstained Shingles	5 to 2—16 long 5 to 21/4—18		XXXXX Perfects—Vert.	
Dimigres	long		Grain and Extra Clear Perfections—Vert. Grain	
	4 to 2—24 long		Royals-Vert. Grain	
Stained Shingles	5 to 2—16 long		XXXXX Perfects-Vert.	All Stand-
Omnigics	5 to 21/4—18 long		Grain Perfections—Vert. Grain	ard Colors and
	4 to 2—24 long		Royals-Vert. Grain	Blends
Wood Lath	36×1½48		White Pine-No. 1 and No. 2	
	long 36x1 16 - 32	nd i	Fig. No. 1 and No. 2 Yellow Pine No. 1	
	long		Cypress—No. 2	
Framing and Dimension	2x2 2x3	1 %x1 %		Specified
Lumber	2x3 2x4	1 % x 2 % 1 % x 3 %	Fir-No. 1 Common and No. 2	longtha
	2x6	1 %x5 1/2	Common	o to 30 ft.
	2x8 2x10	1 % x7 ½ 1 % x9 ½	Yellow Pine—No. 1 Common	
	2x12	1 % x 11 ½	and No. 2 Common	
Sills and	3x4	2 ½ x3 ½		
Timbers	4x4 4x6	3½ x3½ 3½ x5½	Fir—No. 1 Rough and No. 1	Specified
	6x6	$5\frac{1}{2}x5\frac{1}{2}$	Common S 4 S Yellow Pine—No. 1 Rough and	lengths
	6x8 8x8	5 ½ x7 ½ 7 ½ x7 ½	No. 1 Common S 4 S	o to sait,
Boards and	1x2			Mixed or
Strips	1x3 1x4		Fir-No. 1 Common and No. 2	specified
	1x6		Common Yellow Pine—No. 1 Common	lengths
	1x8		and No. 2 Common	o to lo it.
	1x10 1x12		,	

All the above lumber items are shipped from Chicago, Ill., St. Paul, Minn., St. Louis, Mo., Hattiesburg, Miss., Albany, N. Y., Baltimore, Md., Chehalis, Wash. We will quote you a delivered price from the yard nearest you. IMPORTANT—The kind of lumber used in different parts of the country varies—for example, yellow pine framing lumber is used exclusively in some sections and fir in others. All woods are not carried at each yard—our quotation will be made on the kind of wood carried at yard nearest to you.

RED CEDAR CLOSET LINING

There is real economy in lining your closets with this fine aromatic red cedar. You will save enough on clothes and fur storage to more than pay for the cost of material. Cedar lining is %-inch thick by 31/4 inches wide. It's tongued and grooved with edges

and ends matched like flooring. One carton contains enough to cover 25 square feet. 274 H 1001—Per carton. Ship. wt. \$2.65 Shipped Not Prepaid from Chicago or Philadelphia



EVERY piece of lumber sold by Ward's is carefully graded according to standards adopted by the Manufacturers' Associations and in accordance with the United States Bureau of Standard's specifications.

Expert lumbermen carefully examine every piece of lumber. It must meet the highest standards of quality for the grade specified. That's why you can depend on getting lumber of the grade you want or better, from Ward's.

Our enormous volume means that we secure the lowest possible prices. And selling by mail is the most economical method of doing business. That's why our prices are low. If you can use a carload you'll save even more... because your freight charges will be lower.

FIR VENEER PANELS



If you have a hobby or are just plain practical you'll find this 3-ply Veneered Fir the ideal material for jig or coping saw work since it does not chip easily. It is thin yet strong. Use for making book racks, table tops, cabinets, shelves and for many other practical purposes.

Ward's 3-Ply Fir Veneered Panels are sound on both sides for paneling. Finished in the white, they take paint, varish, or stain Shipped Not Preparation Chicago, Detroit, Cleveland or Christoptical Panel Shipped Not Preparation of Christoptical Panel Shipped Not Preparation of Christoptical Panel Shipped Not Panel Pan

Width	Length	274 VH 899 1/4-in. Thick	Shipping Weight	274 VH 895 %-in. Thick	
24 In.	48 In.	32c	9 lbs.	44c	13 Ibs.
		40c			
24 In.	60 In.		11 lbs.	55c	17 lbs.
24 In.	72 In.	48c	13 lbs.	66c	20 lbs.
24 In.	84 In.	56c	15 lbs.	77c	22 1bs.
30 In.	72 In.	60c	16 lbs.	83c	25 Ibs.
36 In.	84 In,	84c	22 1bs.		
48 In.	72 In.	96c	26 lbs.		
48 In.	96 In.	\$1.28	35 lbs.		



INDOOR TENNIS TABLE TOPS

Same high quality Fir Veneer Panels as listed above. Furnished in two sizes for standard size table. Small size comes in pairs—can be put away in closet. Large size is for a one piece table top.

Art. No.	Size	Thick.	Price	Ship.Wt.
274 H 925	60 by 54	% inch	Pair \$3.35	50 lbs.
274 H 927	50 by 54	% inch	Pair 4.95	85 lbs.

ASH PIT DOOR | STEEL PACKAGE RECEIVER



Door sets in wall at bottom of Ashpit. Frame with flanges to hold door in brick work included. Made of Pressed Steel galvanized and painted black. Ship. wts. 6 and 7 lbs.

6 and 7 lbs.

274 VH 919— 8 by 8 in \$1.05

274 VH 920—10 by 8 in\$1.35 Shipped Not Prepaid from ware-





FLOORING MAPLE

Write for Free Estimates on Flooring

HARDWOOD floors, especially Oak, are so expressive of good taste that many people have the idea that they are expensive but such is not the case at Ward's. You can lay Oak flooring over your old floors for just a little more than the cost of many perishable floor coverings—while for upkeep and permanent value there is no comparison. Time stands still for oak floors—like fine old furniture, they grow more beautiful with age.

Hardwood floors can be put down room by room in just a few days and without disturbing the rest of the house. No woodwork need be removed except the carpet strip (quarter round moulding). They are smooth, sanitary and easy to keep gleaming. They may be finished with gloss varnish or dull rubbed effect.

Article Number	Kind of Wood	Grade	Size Thick Width In. In.
274 H 980 274 H 982 274 H 983 274 H 984	1/4 Sawed Red Oak Plain Red Oak Plain Red Oak Plain Red Oak Plain Red Oak	First (Clear) First (Clear) Second (Select) Third (No. 1 Com.)	13/6×21/4 13/6×21/4 13/6×21/4 13/6×21/4
274 H 985	¼ Sawed Oak	First (Clear) First (Clear) Second (Select) Third (No. 1 Com.)	36 x 1 ½
274 H 987	Plain Red Oak		36 x 1 ½
274 H 988	Plain Red Oak		36 x 1 ½
274 H 989	Plain Red Oak		36 x 1 ½
274 H 990	Maple	First (Clear)	13/6x21/4
274 H 991	Maple	Second (Select)	13/6x21/4
274 H 992	Maple	First (Clear)	36x11/2
274 H 993	Maple	Second (Select)	38x11/2
274 H 951	Flat Grain Yellow Pine	B & Btr.	25/32×3 1/4
274 H 952	Flat Grain Yellow Pine	No1 Com.	25/32×3 1/4
274 H 958	Flat Grain Yellow Pine	B. & Btr.	25/32×2 3/8
274 H 1000	Edge Grain Fir Flooring	B. & Btr. (not end)	25/32×31/4
274 H 953	Flat Grain Fir Flooring	B. & Btr. (matched)	25/32×31/4

Just tell us the kind, grade and amount of flooring you need. We will quote you a delivered price. This estimating service is absolutely free. You are under no obligation to buy.

How to Estimate Amount of Flooring Needed

When estimating the amount of Oak or Maple flooring required, remember that the width of face given above is the finish size or covering size of the flooring, and that flooring having 1½-inch face is counted as being 2 inches wide to allow for the tongue and groove. Because of this, it is necessary to add ½ to the actual number of square feet of surface to be covered. Tell us the size of your rooms and we will estimate for you the amount of flooring needed.

Explanation of Grading of Hardwood Flooring

First or Clear Grade is the best. The face is clear, as the name implies. Comes in lengths 2 to 16 feet with lengths under 4 feet not to exceed 20%.

Second or Select frade: contains some slight imperfections, but is excellent flooring, suitable for all, except the very highest class work. Comes in random lengths 1½ to 16 feet.

Third Grade or Number One Common: can be used where a good serviceable floor is wanted without so much regard for the finished appearance. It will admit sound knots and defects which will not affect its wearing qualities.



These Windows cannot rot, warp, or splinter. They admit more light and ventilation. Strongly constructed. Shipped complete with frames. No hinges or locks to buy. Glass is held in place with steel clips. We supply the clips, but do not furnish the glass. Windows have a continuous double overlapping weather strip which makes them weathersproif.

weather strip which makes them weatherproof.							
Glass	No.	Masonry Opening Size					
Size	· of	Width Height	Wt.	Price			
Inches	Lights	Ft. In. Ft. In.	Lbs.	Each			
10x12	3	2-93/4 x 1-3	20	\$2.00			
12x18	3	3-3% x 1-91/8	25	2.35			
10x20	3	2-934 x 1-11	24	2.25			
14x20	2	2-7% x 1-11	22	2.10			

STEEL BASEMENT WINDOWS COAL CHUTE DOORS



Shipped promptly Not Prepaid from conveniently located warehouses listed at right.

ADJUSTABLE DOME DAMPER



The Damper is controlled by a regulating handle which extends out on the face of Fireplace. Made with proper flange for fastening into brick work. Overall depth of damper 13/4 in. Not Prepaid. 274 VH 922—State size. Shipping Points Below.

Fireplace	Length	Ship. Wt.	Price
Width	Over All	Complete	Complete
30 inches	33 inches	27 pounds	\$4.35
32 inches	35 inches	29 pounds	4.70
36 inches	39 inches	33 pounds	5.25

DUMP



Here's something that will save you a lot of steps and make your home much easier to keep clean. This Ash Dump sets in the floor of the Fireplace below your grate. Allows ashes to fall in an ashpit in the basement. You'll have none of the dirt or dust that ordinarily comes from cleaning the fireplace. Made of heavy steel with tilting doors. Overall sizes 5½ by 9½ inches. Ship. wt. 3 lbs. Not Prepaid. Shipping points below. 65c 274 VH 921—Each.

Steel Basement Windows, Coal Chule Doors and Steel Building Accessories shipped promptly Not Prepaid from nearest Warehouse listed below. You sawe time and freight. Cleveland, Ohio Detroit, Mich. Boston, Mass. Philadelphia, Pa. Philodelphia, Pa. Philodelphia, Pa. Philodelphia, Pa. Philodelphia, Pa.



MAKE USEFUL PLACES OF UNUSED SPACES

Use Superb 4-Ply Wallboard It Saves You Most in TIME..WORK..MONEY

A new cheerful bedroom in the attic for Sonny . . . An up-to-date, remodeled "all her own" room for growing daughter ... A cozy club-room in the basement for entertaining company ... Or an entirely new, smartly paneled living room to brighten up your

All those desirable improvements you've thought about can be yours with the least possible expenditure of labor, time and money with Ward's SUPERB 4-ply Wallboard. So inexpensive you can do several rooms for what one room would ordinarily cost in the usual materials. So light in weight, it's easily handled by one man, and so easily worked you can do it yourself with only a hammer, nails and saw! A room is completed quickly, because each sheet 48 inches wide will just cover the distance between three studdings set 16 inches apart, and from floor to ceiling. When you drive the last nail, the job is done. No painting, papering or decorating is necessary because Superb Wallboard has tinted surfaces; cream on one side, salmon on the other. It's amazingly simple and economical—and completely satisfactory, as hundreds of customers write to tell us. See typical letters from enthusiastic customers at the left.

A 10 by 12-Foot Room With 8-Foot Ceiling Costs Less Than \$13.50

The cost of Ward's Superb Wallboard is so little that it's almost unbelievable. If you have a room 10 by 12 feet, with walls 8 ft. high (about the average size of bedrooms) you can finish it for less than \$13.50! Note that it is offered in a great variety of sizes, so that you can order the length and width that is most economical for you. You'll want the length to be the full height of your wall—that eliminates waste, cutting, and loss of time.

In remodeling old rooms, you can apply it right over the plaster. This means cracked and damaged plaster surfaces do not have to be removed—a great time and labor saving that is of real importance to the man who intends to do the work himself.

4-Ply Construction Makes It Tough, True and Warp-Resisting

Superb Wallboard is one of the finest quality wallboards you can buy. It is superior to many grades selling elsewhere at higher prices, because it utilizes the principle of multiple plies to secure greater strength and toughness for every ounce of weight. Each sheet is made up of four separate sheets of material, firmly and securely cemented together under pressure, so that it is hard, flat, and warp-resisting.

Superb Fiber Wallboard Has a Wide Variety of Purposes

Pictured at the left are a few of its many uses. It is ideal for covering old plaster and as sheathing or insulation on new buildings. On the farm it is used extensively in live stock and poultry buildings. Garages lined with this Wallboard maintain more uniform temperatures, because this extra layer of protection effectively seals out drafts and provides a desirable dead air space between the 2×4 studding.

Prices on SUPERB Wallboard

	SHEETS	32 INC	HES WI	DE	SHEETS 48 INCHES WIDE			
LGTH.		Sq. Feet		Per		Sq. Feet		Per
	Number	toSheet	Weight	Sheet	Number	toSheet	Weight	Sheet
6 Ft.	274 H 280	16	10 lbs.		274 H 286		14 lbs.	65c
7 Ft.	274 H 281	183/3	11 lbs.		274 H 287		17 lbs.	76c
8 Ft.	274 H 282	211/3	13 lbs.	57c	274 H 288		19 lbs.	86c
9 Ft.	274 H 283	24	14 lbs.		274 H 289	36	21 lbs.	97c
10 Ft.	274 H 284	262/3	16 lbs.	73c	274 H 290	40	24 lbs.	\$1.08
12 Ft.	274 H 285	32	19 lbs.	86c	274 H 291	48	29 lbs.	1.30

Shipped Not Prepaid from Chicago, Kansas City, Saint Paul, Albany, Buffalo, or York, Pa., whichever is nearest you. Estimated freight charges on

Sandstone, Minn.

32 In. by 6 Ft. Sheets

What Users Say:

"I am certainly well pleased with the wallboard I purchased from you three years ago. It was put on over old plaster and was easy to apply. It was easy to paint the smooth, hard surface and it surely stays put."

John Horak.

Medford, Minn.

Mrs. Mary, A. Hall,

Long Beach, Wash.

G. E. Wilcox. Gilby, N. D.

Walter N Elliott

Panel Strips

Clear soft wood panel strips. For joints and wall panels. 1% by 5/16 in. Ship. wt. 100 ft., 15 lbs. Not Prepaid. 174 H 308-Per 100 lineal feet 75c

Joint Tape

Tough brown kraft paper 1½ in. wide. One side gummed. 250 ft. per roll. Ship. wt. 1 lb. Mailable but Not Prepaid. 74 VH 307—250-ft. roll......22c

You can't change the weather...but you can insulate with CEL-BOAR



35% of the Heat Lost in Your Home is Through the Roof! Attic Insulation Will Pay for Itself in Fuel Saving

35% of the winter heat loss in the average home is through the roof! Even an overworked heating plant can't keep your home very warm in the face of such odds. And even if it could, that's an extravagant waste of fuel. CEL-BOARD Insulation keeps heat indoors-for your comfort, protection and economy.

Just the opposite of this is true in the summermuch of the heat of a blazing sun is showered into your home through the roof. Keep this heat above the room level with CEL-BOARD Insulation and keep your home cooler.

What Government Bureau Says About Fully Insulated Homes

The U.S. Department of Commerce estimates that insulating board will save fully 50% of the fuel cost when used on a weather-stripped and storm-sashed home. (Bureau of Standards, Circular LC227, Apr. 19, 1927.)

No new home should be considered complete without insu-

lation. Fuel savings alone will pay for it in a short period of years—and the comfort is free! 90 degrees in the shade becomes 70 degrees when CEL-BOARD furnishes the shade! You'll get 20 degrees more warmth from your fuel when CEL-BOARD completely insulates your home.

Cel-Board is as Fine as Any Insulating Board Made

CEL-BOARD is the product of one of America's large, wellcell-board is the product of one of America's large, well-known insulating board makers. It has all the advantages so widely advertised for this type of material. Insulation—sound-deadening—ease of handling—ease of sawing without splitting or cracking. Unequaled for refinishing attics, or building new rooms into your home. Ward's direct-to-you selling makes a big difference in price.

The special construction of CEL-BOARD gives it a firm, uniformly textured body (no "layers") that is knit into a solid unit and highly compressed when manufactured. This gives it great density and structural strength. Nail heads cannot pull through it in any practical use. Every individual fiber is waterproofed at the mill. Heat, cold or moisture will not affect it—it will not rot.

You don't have to build a new home to gain these benefits. Attic Insulation helps seal up the biggest source of heat loss. It is so easily installed that it is generally advised for homes already built. The cost is moderate—savings in fuel will soon pay for it. The added comfort it brings your family is free.

The small sketch below at right shows a typical installation for homes already built where an extra room is desired. Or it is only necessary to cover the attic floor, or nail direct to the floor joists if they are exposed to gain the same results.

Use for Every Purpose of

Construction and Building

Use CEL-BOARD for lining walls, floors and ceilings in homes, garages, barns, poultry and hog houses, and all types of buildings. See pictures at right and below for views of its usefulness

and efficiency. May be applied over old, cracked plaster in remodeling rooms. Easily handled—quickly applied.

CEL-BOARD bonds perfectly with plaster—providing almost 3 times the tenacity of wood lath. Offered in specially cut sheets 1½ by 4 ft., with one edge shiplapped for continuous joints for plastering. Saves part of the cost of labor for applying wood lath.

Use 1½-inch lathing nails. For Easy Payments see Budget Plan, Page 4. Shipped promptly Not Prepaid from stock. See Estimated Freight Charges on Page 3. State size. 174 H 260-Square Edge-1/2 inch thick

Size of	Square	Shipping	Price
Sheet	Feet	Weight	Per
in Feet	Per Sheet	Per Sheet	Sheet
4 by 6	24	17 lbs.	86c
4 by 8	32	23 lbs.	\$1.15
4 by 9	36	26 lbs.	1.30
4 by 10	40	29 lbs.	1.44

Long Edges Shiplapped to be used as plaster base. Size of sheet 1½ by 4 feet. 6 square feet per sheet. Shipping weight 5 pounds. 174 H 261-Per sheet

HOW CEL-BOARD HELPS TO BUILD EXTRA PROFITS FOR THE FARM



Poultry Houses



Brooder Houses

Healthy animals are profitable animals. Good health is safeguarded by good ventilation. And good ventilation can only be secured by insulation.

Properly insulated farm stock and poultry buildings pay dividends in better meat, egg and milk production, Insulation eliminates dampness, the worst enemy of your herd and flocks, makes the

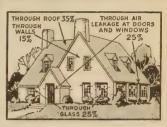




Hog Houses

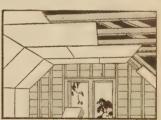
buildings cooler in summer and warmer in winter. Comfortable animals and fowls produce a greater return in quality and require less care.

Ward's Engineering and Information Department will help you plan the type of building you are interested in. Please write to us if you are in need













Use WARD'S BUILDING PAPER generously

The saving on fuel alone soon repays its low initial cost

YOU DON'T build or remodel every day. That is something most people do only once or twice in a life time. And it's economy in the end to do the job right while you're at it. For instance—the liberal use of good Building and Insulating Papers pays far more than its cost, in added comfort and fuel savings.

Whether you want to keep out the heat from a blistering summer sun-more effectively shut out the penetrating chill of winter's icy blasts-hush the noise of hurrying feet or shrill voices-or do any of many other things Ward's building papers and felts are designed to accomplish—you'll find exactly the right material described below.

For years Ward's has specialized in first quality building papers.

Each of the products we offer represents years of development and practical experience under almost every imaginable climatic condition. And each is priced at a substantial saving over the usual cost of similar products elsewhere.

Enjoy the added comfort—and extra savings they assure. Ward's Budget Plan of Easy Payments makes it convenient for you to take full advantage of this profitable investment in comfort and economy-see Page 4.

All Ward's Building Papers Shipped promptly Not Prepaid from Stock. Actual (also shipping) Weight shown with each listing below. Estimated Freight Charges are on Page 3.

RED ROSIN SIZED SHEATHING



A standard quality, hard, smooth-sur-faced, rosin-sized building paper used extensively for gen-eral sheathing pur-

Keeps out wind, dampness and moisture, when used under siding and between floors. Made siding and between floors. Made of tough paper pulp stock in three popular weights, each put up in rolls 36 inches wide containing 500 square feet. Its low price makes it economical for protecting newly finished floors when building and many similar uses.

 174 H 218—Light Weight. Actual and ship. wt. 20 lbs. Per roll.
 35c

 174 H 220—Medium Weight. Actual and ship. wt. 30 lbs. Per roll.
 53c

 174 H 223—Heavy Weight. Actual and ship. wt. 40 lbs. Per roll.
 70c

BLUE PLASTER CARDBOARD

A heavy, durable paper of tough texture that makes an excellent sheathing paper. Similar to red Rosin Sheathing described at heavier, and of described at the state of the sta ing described at left, except heavier and of dark blue color. Used for lining walls and ceilings of attics, basements, summer cottages, garages, etc., to make

of attics, basements, summer cottages, garages, etc., to make them warmer.

174 H 234—Roll of 250 sq. ft., 36 in. wide. Weight 30 lbs.

Per Roll.

174 H 235—Roll of 500 sq. ft., 36 in. wide. Weight 60 lbs.

Per Roll.

74 H 175—Large Headed Tacks for applying. each 250 square feet. Per package.

Order one 8-oz. package for

STANDARD DEADENING FELT



\$185

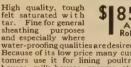
Plenty of this heavy felt between floors and | walls deadens sounds and insulates from heat and cold.

Also used under floor coverings to cushion carpets, rugs and lino-leum against the wear of pounding heels and to add warmth and comfort to the home.

Unusually low priced for this good quality. A good investment for any home.

Rolls 36 inches wide contain about 450 square feet.

TARRED ROOFING FELT

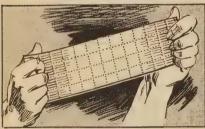


tar. Fine for general sheathing purposes and especially where water-proofing qualities are desired. Because of its low price many customers use it for lining poultry houses, milk houses, garages, etc. Three or four thicknesses thoroughly cemented together with coal tar pitch and the top surface covered with gravel makes an excellent tar and gravel roof. Also used for roofing and siding on sheds, camps and other temporary buildings.

buildings. 174 H 249—Roll of 432 square feet, 36 inches wide weighs 64 pounds.

\$1.85

STRONG REINFORCED SHEATHING



An exceptionally sturdy, water-proof building pa-

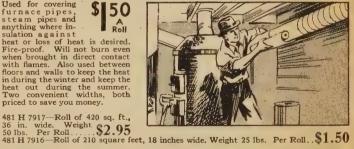
Roll proof building paper reinforced with plenty of strings cross laced one inch apart between two layers of tough, tan color Kraft paper and all bound together with waterproof asphalt. Used by builders everywhere for high class sheathing work. Especially good for use under brick veneer, stucco, etc., as it does not dry out and lasts indefinitely without appreciable deterioration or loss of when putting it on.

effectiveness. Its tough texture also prevents tearing when putting it on. 174 H 225—Roll of 500 square feet, 36 inches wide. Weight 30 lbs. Per Roll ...\$2.45

ASBESTOS INSULATING PAPER

Used for covering furnace pipes, steam pipes and steam pipes and anything where insulation against heat or loss of heat is desired. Fire-proof. Will not burn even when brought in direct contact with flames. Also used between floors and walls to keep the heat in during the winter and keep the heat out during the summer. Two convenient widths, both priced to save you money. priced to save you money.

481 H 7917-Roll of 420 sq. ft.,



AP-CAP FASTENERS



Waterproof Seams Without

Lap-Kaps are a patented device for fastening seams of Superslate or Atlas Roll Roofing securely, making them water-tight without the use of liquid cement. For use only where roofing is to be laid directly on boards. For prices of roll roofing with Lap-Kap Fasteners see Pages 94 and 95.

RIDGE OR VALLEY STRIPS

Famous Radio Superslate quality made especially for use with Radio Superslate shingles or roll roofing listed on Pages 95 and 96. Ridge strips are 9 inches wide and are put up in rolls of 25 feet weighing 15 lbs. Valley strips are 18 inches wide and are put up in rolls of 25 feet weighing 30 lbs.

Shipped Not Prepaid from same points as listed for plain slate roll roofing on Page 95.

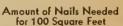
Ridge Strips

Valley Strips

Price Per Roll......70c

ROOFING NAIL

Galvanized and rust-resisting with



Kind of	1%-in.	1-in.
Shingles	Nails	Nails
Four-in-One Strip Lock Shingles Hexagon Strip	1 3/4 lbs.	2% lbs. 1 lb. 2% lbs.

WARD'S SAVES YOU MONEY ON EVERYTHING YOU NEED

If you don't see it here, look in our General Catalog

SOMETHING you are looking for? Some high grade varnish for your new front door? Yes, of course we have it. You'll find it in our General Catalog. And there are tools that you will need if you plan on doing your own remodeling-wiring materials, paints and a lot of other high grade home remodeling needs—complete lines too extensive to show in this catalog.

Pick up your copy of Ward's General Catalog. Turn to

the great Home Modernization Department. It's full of ideas to make your home more comfortable, more convenient, increase its value. Savings on everything you order. You always pay less when you purchase by mail.

If there's something you can't find in our General Catalog, something special, write our Engineering and Information Department. They'll gladly quote you prices without obligation.



Turn to our general Catalog for complete selection of Lock Sets, Window, Cabinet and Door Hardware. We affer a choice of many designs and finishes to fit the architecture of most any

home. Garage and Barn Door

Hardware, Nails, Screws-every

thing at substantial savings.

METAL ROOFING

There is no finer metal roofing made than Ward's new 2-oz. ZINC COATED COPPER-STEEL ROOFING. Read in our general catalog why it lasts longer—how easy it is to apply—how much you sove buying it by mail. You can also make a savings on Eaves Trough and fittings, either galvanized steel or copper.



PAINTS

When you need point, varnish, enamel, lacquer or even a brush, don't forget to use your copy of Ward's general catalog. Quality paints add protection, charm and beauty to your home. We make them all in our own factory and know what is in every can. Selling them direct to you by mail ossures lower prices-always.



ELECTRICAL

Over 1,000 items in our electrical department. Anything you may need to completely wire your home. Lighting fixtures, fuses, switches, power motors, or even a complete lighting plant—every-thing at sensibly low prices. Camplete wiring for a 5-raam

hause can be baught at Word's for about \$30.00.



TOOLS

Whether on expert or just a handy man, you'll find a lot of satisfaction shopping through our hardware department. Ward's Lakeside Brand always repre-sents a fine quality. You'll find many other famous names, too. There's everything from a nail or bolt to a complete workshop.

FREE! Book of Fine NON-FADING WALLPAPER

DO YOUR rooms suffer from that "tired look?" New wallpaper will make them cheery again . . . make them bid a brighter, homier welcome to your friends ... make your entire home seem new and inviting once more!

Ward's 1933 Wallpaper Book contains nearly a hundred actual samples of dainty, refreshing, friendly papers that will be an inspiration to the whole family. Beautiful new patterns designed by some of America's foremost designers . . . Imported patterns, printed here in America exclusively for Ward's customers . . . Non-Fading Papers! . . . Washable papers! . . . Lovely borders printed on to look just like they will on your walls! . . . Full instructions, too, that show you just how easily, how inexpensively you can hang them!

PRICES NOW LOWER Compare these quality papers anywhere—you'll find we've set new records for value-giving! Qualities are

even better, designs lovelier, yet prices are much lower than last year—perhaps lower than for years to come. Tear off that coupon now. At such prices you can't afford not to re-paper this year.



NON-FADING PAPERS as Low as 10½ a Single Roll!



Atlas Smooth Surfaced ROOFING

For Easy **Payments** See Page 4 COMMENDED BY WARD'S BUREAU OF MO STANDARDS CO

Choose it for a Fire Resisting, Weather Resisting, Permanent Roof at Lowest Possible Cost

MEDIUM Weight \$

Per Roll Per Roll A Roll

HEAVY Weight \$

EXTRA HEAVY Weight \$ Per Roll

Read What Others Say About Atlas

"I have used several brands of roofing and have had the best results with your Atlas brand. Have some that has been in use now for thirteen years and it looks as though it would be good for thirteen years more."

W. G. Huntington
Liberty, Nebr.

"We are very satisfied with the roofing. I put it on my-self and it was sure easy to apply. I figure I saved \$1.70 on every roll besides the freight; yours is once again as thick as the other."

John Brezina Wagner, Mont. "The Atlas Asphalt Roofing purchased from you some time ago has proved perfectly satisfactory being of rather heavier weight than some I had purchased locally. It was put on my garage and made a neat appearing job."

J. V. Clarke Sparkill, N. Y.

EPENDABLE protection from driving, beating rain and melting snow or ice. long-lasting protection which withstands years of scorching summer sun and biting winter cold—that, after all, is the important thing to consider in selecting a new roof. And that's exactly what Atlas Smooth Surface Roofing provides—at the lowest possible cost. The tough, long fiber felt—completely saturated with fine quality, imported asphalt—and smoothly finished with a partially imbedded coating of flake mica-lasts as long as any ordinary wood shingle roof.

Most Atlas users get at least ten or twelve years trouble-free service from Medium weight Atlas Roofing-frequently fifteen or twenty years dependable protection from the Heavy or Extra Heavy weights. In addition, both the Heavy and Extra Heavy weights are listed as Standard by Underweights. In addition, both the received and Extra Picary weights unlike the protection from flying sparks to save up to 12 per cent over wood shingle insurance rates. Easy to put on, too. Nail it to the roof boards or over the old roofing or wood shingles. Each roll contains 108 square feet and covers 100 square feet of roof surface, allowing 2 inches for laps.

Large head galvanized roofing nails, cement, or patented Lap-Kaps (see page 92) and nails and complete instructions for laying included with each roll. For use over old roofing, we recommend Extra Heavy or Heavy Weights, packed with 1¾-inch nails. For new roofs, order rolls packed with 1-inch nails. All roll roofing is suitable for a roof having a pitch of 1½ inches or more per running foot.

Medium Weight

Actual and shipping weight, per roll, 45 lbs. Each roll covers 100 square feet.

274 H 30—Complete with 1-inch galvanized nails and asphalt cement for lap. Per Roll.....\$1.32

Heavy Weight

Extra Heavy Weight
Actual and shipping weight 65 lbs. Roll covers 100 sq. ft.
274 H 10—With 1-inch galvanized nails and
asphalt cement for laps. Per roll.
274 H 11—With 1¾-inch galvanized nails and
asphalt cement for laps. Per roll.
1.90

274 H 12-With Lap-Kaps and nails. Per roll. 2.10 Shipped Not Prepaid from Chicago, III., Kansas City, Mo., St. Louis, Mo., Baltimore, Md., Albany, N. Y., Cincinnati, Ohio, York, Pa., Savannah, Ga., Southern Illinois, Central New York, Minneapolis, Minn., Boston, Mass., Western Pennsylvania, Central New Jersey, Southern Alabama. See Estimated Freight

WARD'S COMBINATION ROLL ROOFING



Tested for durability.

Recommended by Ward's Bureau of Standards. Your as-surance of high quality and long-last-ing satisfaction.

A Roll

Our Lowest Priced Roofing

Here's an asphalt Roofing that gives protection similar to Atlas but not for so long a time. Designed for temporary buildings, roofs or wall surfaces where only a few years service is requiredand priced to provide that service at a substantial saving.

Made of good roofing felt, saturated and coated with asphalt. Easy to put on. Roll contains 108 square feet and covers 100 square feet of surface allowing for 2-inch laps. Comes packed complete with plain large head roofing nails and liquid asphalt cement for laps. Suitable for any roof having a pitch of $1\frac{1}{2}$ inches or more per running foot. Shipped Not Prepaid from same shipping points as listed above for Atlas. See Estimated Freight Charges on Page 3.

274 H 87—Actual and ship. wt. per roll, 35 pounds. Price.......... 79c

How to Order Roll Roofing and Shingles

For gable roofs multiply length of roof (in feet) L/length of rafter on one side (in feet). Double this amount to allow for other side. Allow extra for gables or porches. Divide by 100 to find number of rolls or by the roof coverage per bundle of shingles. 1-inch nails are for

new roofs. If laid over old roof, order rolls packed with 1¾-inch nails.

Send dimensions of roof and we will estimate for you. All roll roofing suitable for any roof having pitch of 1½ inches or more per running foot.

Freight Charges Are Low on Roofing

Above you will find a list of shipping points for our roofing. There's one near you—and we always make shipment from the point nearest you to save you time and money. See Page 3 for estimated freight charges per 100 lbs.

SUPERSLATE Slate Surfaced ROOFING



For Easy Payments See Page 4

The roofing to choose for LASTING BEAUTY and utmost Roofing PROTECTION

HE added protection and extra life of a slate surface roof are worth far more than they cost especially when you take advantage of the substantial savings Ward's economical selling methods and nation-wide distribution affords.

The hard, flint-like surface of colorful crushed minerals—firmly embedded in a heavy coating of fine, imported asphalt—stands up for years under normal wear. The tough, long fiber felt—thoroughly saturated with the same fine quality asphalt—is a fitting base for this armor-like mineral surface and assures a roofing which lasts almost indefinitely. Thousands of Super Slate roofs twelve to seventeen years old are still giving the same dependable service and look almost as good as the day they on. Over a period of more than twenty years Super Slate Roofing has given long time satisfaction under almost every conceivable weather condition and in practically every kind of climate.

Compare Ward's Quality—then Compare Ward's Low Prices

Read below what heat-cold-ice-snow-rain-sun-and time itself try to do to any roofing. Learn how Radio Super-Slate Roofing withstands these tests-how it defies the elements, resists fire, reduces insurance rates up to 12 per cent over wood shingles and assures lasting protection for years and years to come. Then—keeping its unsurpassed quality in mind—compare Ward's low price and see how little it costs to have this extra beauty and protection.

Shipping Points

FOR PLAIN SLATE

Chicago, Ill.
Kansas City, Mo.
St. Louis, Mo.
Baltimore, Md.
Albany, N. Y.
Cincinnati, Ohio
Southern Illinois
Central New York
Vork Penn Central New York York, Penn. Minneapolis, Minn. Boston, Mass. Western New York Central New Jersey

SHINGLE DESIGN

Chicago, III.
Baltimore, Md.
Albany, N. Y.
Minneapolis, Minn.
Kansas City, Mo.
York, Penn.
Southern Illinois
Cincinnati, Ohio
Central New York

Radio Super-Slate Roofing is suitable for any roof with a pitch of 1½ inches or more per running foot. Each roll contains 108 square feet and covers 100 square feet of roof surface, allowing for 2-inch laps. Cement for laps and large head, galvanized roofing nails, and instructions for laying, included with each roll. Specify 1-inch nails for new roofs and 1¾-inch nails when roofing is to be laid over old roofing or shingles. (Or patented Lap-Kaps described on Page 92.) Actual and shipping weight, per roll, 85 to 90 lbs. Read How to Order Instructions on opposite page and see Page 3 for Estimated Freight Charges. Shipping points shown at left. Not Prepaid.

Price per Roll-Plain Super-Slate Roofing

With 1-Inch Nails 274 H 58—Blue-Black 274 H 54—Red 274 H 56—Green \$1.70

With 134-Inch Nails 274 H 59—Blue-Black 274 H 55—Red 274 H 57—Green. \$1.80

With Lap-Kaps and Nails 274 H 74—Blue-Black 274 H 70—Red 274 H 72—Green. \$2.00

Price per Roll-Shingle Design Roofing

The same Super-Slate roofing with an attractive shingle design. It gives your home much of the beauty of a colorful shingle roof at much lower cost. The black shingle lines last the full life of the roofing. Has 2-inch watertight underlap the same as plain Superslate, Furnished with nails and cement.

With 1-Inch Nails
274 H 40—Red.
274 H 42—Green. Per roll.......\$2.35
With 13/4-Inch Nails
274 H 41—Red.
274 H 43—Green. Per roll......\$2.45 With 1-Inch Nails

HERE'S PROOF OF RADIO SUPER SLATE QUALITY You Can Make Many of These Tests Yourself



Step on it-scuff it! See for yourself how the flintlike slate surface assures years of dependable, trouble-free service.



Soak it in hot or cold water for hours or days at a time! Even freezing, then dipping in boiling water does not effect it.



Intense heat, 130 degrees, blinding light, more gruelling than a blistering summer sun. Then a rushing, surging, downpour of water, worse than any torrential rain. Again the blinding, blistering heat. On and on goes the endless cycle of the Weatherometer—crowding years of roofing-wear into a few weeks of actual time. And Radio Super Slate proved equal to the best of 28 leading brands tested. Ward's Bureau of Standards say there's none better made.



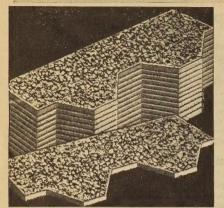
Throw burning embers on it—and watch them sputter harmlessly out! That's convincing proof of its resistance to fire.



Get it good and hot-then freeze it hard as a rock! Neither extreme temperatures nor sudden changes injure Radio Super Slate.

BUYSUPERSLATE Ward'S SLATE SURFACE

We've selected a variety of colors that offer LASTING roof beauty



HEXAGON STRIP SHINGLES SEE OPPOSITE PAGE

Shipping Points

Chicago, Ill.
Kansas City, Mo.
St. Louis, Mo.
Baltimore, Md.
Albany, N. Y.
Cincinnati, Ohio
York, Penn. York, Penn.
Southern Illinois
Central New York
Minneapolis, Minn.
Boston, Mass.
Western New York
Central New Jersey HERE'S a favorite you'll find on many of the better homes in almost every progressive community. And rightly sol The distinctive hexagon design gives that trim, well groomed appearance—and the rich, natural salate colors stand out in smart contrast to the dull drabness of ordinary roofs. Six attractive colors—three plain, one blenæd and two mixed—all permanent and non-fading—to choose from. Same hard, flint-like slate surface—same tough, long-fiber felt—same fine,

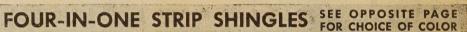
Standard Hexagon

Each strip 11½ inches wide by 36 inches long—providing a roof with 2-in. head-laps. Each bundle of 43 strips covers 50 square feet of roof surface. Actual and shipping weight per bundle, 80 lbs. 274 H 129—Red. Per bundle. 274 H 130—Green. Per bundle. 274 H 131—Blue-black. Per bundle. 274 H 134—Color-blend. Per bundle. 274 H 132—Red Mix. Per bundle. 274 H 133—Green Mix. Per bundle. 274 H 133—Green Mix. Per bundle. 274 H 133—Green Mix. Per bundle. 375 British 132—Red Mix. Per bundle. 376 British 133—Green Mix. Per bundle. 377 British 133—Green Mix. Per bundle. 378 British 133—Green Mix. Per bundle. 379 British 145 British 14

imported asphalt—same dependable construction—as the Super-Slate Roofing described on the preceding page. Will not blow or curl up. Easy to put on—you can do it yourself. Simple instructions included. For use on any roof with at least one-third pitch. Order nails specified on Page 92. Shipped Not Prepaid from points listed at left. Estimated Freight Charges shown on Page 3. You may buy on Easy Payments too—see Page 4 for our Budget Plan.

Super Hexagon

Strips 12 by 36 in.—provide a roof of double thickness with 4½-inch head-laps. Bundle of 50 strips covers 50 sq. ft. Actual and shipping weight per bundle, 100 ibs.
274 H 146—Red. Per bundle.
274 H 148—Blue-black. Per bundle.
274 H 148—Blue-black. Per bundle.
274 H 150—Color-blend. Per bundle.
274 H 163—Red Mix. Per bundle.
274 H 163—Red Mix. Per bundle.
274 H 163—Gene Mix. Per bundle.



\$180 Bundle

Shipping Points

Chicago, Ill. Kansas City, Mo. St. Louis, Mo. Baltimore, Md. Albany, N. Y. Cincinnati, Ohio Cincinnati, Ohio York, Penn. Southern Illinois Central New York Minneapolis, Minn. Boston, Mass. Western New York Central New Jersey If you prefer the more conventional design shingles—here they are, in a choice of four beautiful, non-fading, natural slate colors. They make a wonderfully attractive roof—one which does full justice to the finest home—and is an outstanding asset to both the owner. and is an outstanding asset to both the owner and the community. The double or triple thickness provides additional protection—and the handy four-in-one strip design saves time, work and money because it can be laid almost four times as fast, yet when finished, has the appearance of individual shingles on the roof.

Double Thickness

Gives 2 complete thicknesses on the roof, with 2-in, head-laps. Ship, wt. per bundle, 100 lbs. Each bundle of 50 strips 10 by 36 inches covers 50 square feet of roof surface.

274 H 117—Red. Per bundle.

274 H 119—Blue-black. Per bundle.

274 H 119—Blue-black. Per bundle.

274 H 121—Color-blend. Per bundle.

230

Read about this long-lasting roofing material—how it's made—its many advantages—and its proven economy—on Page 95. See how it looks on the roof on the opposite page. Our simple instructions make it easy to put on—you can do it yourself. Ward's Budget Plan of Easy Payments makes this better roofing easy to own—see Page 4. For use on any roof with at least one-third pitch. Nails listed on Page 92. Shipped Not Prepaid from points listed at left. For Estimated Freight Charges see Page 3.

Triple Thickness

LOCK SHINGLES see opposite page for choice of color



Shipping Points

Chicago, Ill. Marseilles, Ill. St. Louis, Mo. York, Penn. Kansas City, Mo. Minncapolis, Minn. Western New York

Designed Especially for Roofs Exposed to High Winds

WaNT the beauty and distinction of a toleration at lowest possible cost? Then this new Lock Shingle design will appeal to you. It's good looking—you can see that from the illustration on the opposite page. And you have a choice of three colors to choose from—two plain and one blended. But Radio Super-Slate Lock Shingles have many other advantages, too. They're especially good for roofs which are exposed to high winds—nail heads are covered and do not show—the locking feature assures against shingles blowing or curling up. It's the same long lasting roofing material—with the hard, flint-like slate surface—described on Page 95.

Figure its economy—compare prices with equal quality anywhere—and see what you save at Ward's. Then select the color you like best and order a roof you can be proud of—and sure of—for years and years to come. Easy to lay—no special tools needed, and our instructions show exactly how to do it. Suitable for any roof with at least one—third pitch. Each bundle contains 40 shingles and covers 50 square feet of roof surface. Each shingle 16 by 18 inches. Order nails specified on Page 92. Shipped Not Prepaid from points listed at left. Actual and shipping weight per bundle, 66 pounds. Estimated Freight Charges shown on Page 3.

Red

274 H 97— Per bundle \$1.65

Green
274 H 98—
Per bundle......\$1.65

Color Blend
274 H 99—
Per bundle \$1.85

ASPHALT SIDING see opposite page for choice of color

\$160

Shipping Points

Shipping Points
Chicago, Ill.
Cincinnati, Ohio,
Kansas City, Mo.
Baltimore, Md.
York, Penn.
St. Louis, Mo.
Southern Illinois
Central New York
Minneapolis, Minn.
Boston, Mass.
Western New York
Central New Jersey

Do you want to modernize the outside of your home—make it warmer in winter and cooler in summer—and end painting worries and expense for years to come? Radio Super-Slate Asphalt Brick Siding will do it—economically—effectively—attractively. Same hard, flint-like slate surfaced material as Radio Super-Slate Roofing—same long lasting protection—same dependable service. Read about it on Page 95. Applied in strips over the old siding or directly on the wood sheathing. Complete directions in every bundle. You can easily do the job yourself and increase your savings even more. And what a difference it makes in the appearance.

Red

274 H 100—Red with Black Mortar \$1.60

The natural red or tan color of the crushed slate surface has the appearance of brick and retains its fresh, attractive color without fading. It makes your home look like a brick house. You will take pride in its appearance—and its resale value will be greatly increased. During the life of the Siding, you will save many painting bills as this siding requires no painting. Each strip is 36 inches by 6 inches; each brick design is 8% inches by 2% inches; bundle of 53 strips weighs 70 lbs. and covers 33½ square feet of surface. Use small head lath nails. Shipped Not Prepaid from points listed at left. For Estimated Freight Charges see Page 3.

Tan

274 H 101—Tan with Black Mortar \$1.60



ASPHALT ROOFING with this assurance:





Plain Slate Roll Roofing in our standard Green color. See page 95 for description.

Asphalt Brick Siding Tan above. Red at left.

See opposite page for prices.

Shingle Design Roll Roofing in our standard Red color. page 95 for description.

You can have this ACTUAL bathroom in your home



Fixtures, Plumbing, Kroma-tyle Walls IN YOUR OWN COLOR SCHEME



MONTGOMERY WARD & CO.